# GENERAL CATALOGUE 2011/12





# PLIERS ABC TECHNICAL BASICS

### **BASIC SHAPES OF THE JAWS**

flat jaws

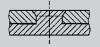
half-round jaws







JOINT CONNECTIONS





The rivet is part of one handle (forged from one piece) high stability for highest

strain





### Iong service life

**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).

### **TYPES OF JOINTS**

#### Lap joint

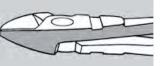
The two plier halves lie on top of each other but are not milled out.

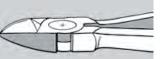
#### Single joint

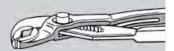
Half the thickness in each pliers handle is milled away in the joint area so that both handles can be laid into each other.

#### 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.









**Cutting Pliers** for cutting or nipping (diagonal, centre and end cutters, carpenters' pincers etc.)



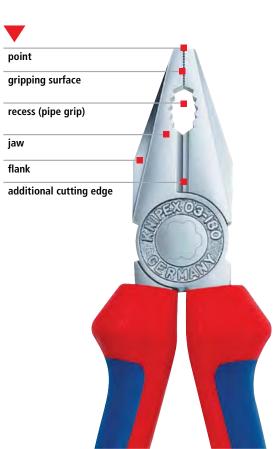
Gripping Pliers (flat-, long-nose and water pump pliers etc.)



**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.)





# **CUTTING CAPACITIES**

The maximum values indicated always stay for the performance limit under the most favourable cutting conditions, when the wire is placed as near as possible to the joint.

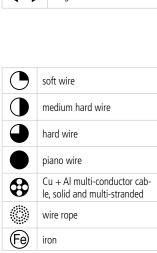
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|------------|--------|-----------|------|------|------|---------|
|            | Length | ø mm      | ø mm | ø mm | ø mm |         |
| 61 0       | 200    | 1,0 - 6,0 | 4,0  | 3,5  | 3,0  | 67      |
| 62 12      | 120    | 0,3 - 1,0 | 0,7  |      |      | 67      |
| 64 0       | 115    | 2,0       | 1,0  | 0,6  |      | 68      |
| 64 11      | 115    | 1,4       | 0,8  |      |      | 68      |
| 64 12      | 115    | 2,0       | 0,8  | 0,5  |      | 68 / 70 |
| 64 22      | 115    | 0,8       |      |      |      | 68      |
| 64 32      | 120    | 1,5       | 1,0  | 0,5  |      | 68 / 70 |
| 64 42      | 115    | 1,5       | 1,0  | 0,5  |      | 68      |
| 64 52      | 115    | 1,3       |      |      |      | 68      |
| 64 62      | 120    | 0,6       |      |      |      | 68 / 70 |
| 64 72      | 120    | 1,5       |      |      |      | 68      |
| 67 0       | 140    | 4,0       | 3,1  | 2,0  | 1,5  | 71      |
|            | 160    | 4,5       | 3,4  | 2,5  | 2,0  | 71      |
|            | 200    | 5,0       | 3,8  | 3,0  | 2,5  | 71      |
| 68 01      | 160    | 4,0       | 2,8  | 2,3  |      | 71      |
|            | 180    | 4,0       | 3,2  | 2,5  |      | 71      |
|            | 200    | 4,0       | 3,5  | 2,8  |      | 71      |
| 69 0       | 130    | 0,4 - 2,0 | 0,8  | 0,8  | 0,8  | 71      |
| 70         | 110    | 3,0       | 2,0  | 1,2  |      | 73      |
|            | 125    | 3,0       | 2,3  | 1,5  |      | 73      |
|            | 140    | 4,0       | 2,5  | 1,8  |      | 73      |
|            | 160    | 4,0       | 2,8  | 2,0  |      | 73      |
|            | 180    | 4,0       | 3,0  | 2,5  |      | 73      |
| 71         | 200    | 6,0       | 5,2  | 4,0  | 3,6  | 74      |
| 74 0.      | 140    |           | 3,1  | 2,0  | 1,5  | 80      |
|            | 160    |           | 3,4  | 2,5  | 2,0  | 80      |
|            | 180    |           | 3,8  | 2,7  | 2,2  | 80      |
|            | 200    |           | 4,2  | 3,0  | 2,5  | 80      |
|            | 250    |           | 4,6  | 3,5  | 3,0  | 80      |
| 74 91      | 250    | 5,0       | 5,0  | 3,8  | 3,5  | 79      |
| 75 02      | 125    | 0,2 - 1,3 | 1,0  | 0,6  | 0,4  | 82      |
| 75 12      | 125    | 0,2 - 1,3 | 1,0  | 0,6  | 0,4  | 82      |
| 75 22      | 125    | 0,2 - 1,3 | 0,9  | 0,4  | 0,3  | 82      |
| 75 32      | 125    | 0,2 - 1,3 | 0,9  | 0,4  | 0,3  | 82      |
| 75 52      | 125    | 0,2 - 0,8 | 0,5  | 0,3  |      | 82      |
| 76 01      | 125    | 0,4 - 3,0 | 2,3  | 1,5  | 0,6  | 83      |
| 76 03/05   | 125    | 0,4 - 2,5 | 1,8  | 1,0  | 0,6  | 83      |

| Article no | ).     |           |      |      |      | page    |
|------------|--------|-----------|------|------|------|---------|
|            | Length | ø mm      | ø mm | ø mm | ø mm |         |
| 76 12      | 125    | 0,4 - 2,5 | 1,8  | 1,0  | 0,6  | 83      |
| 76 22      | 125    | 0,4 - 2,5 |      |      |      | 83      |
| 76 81      | 125    | 0,4 - 1,7 | 1,3  | 0,8  |      | 83      |
| 77 01/02   | 115    | 0,3 - 1,6 | 1,2  | 0,6  |      | 84      |
|            | 130    | 0,3 - 2,0 | 1,5  | 0,8  |      | 84      |
| 77 11/12   | 115    | 0,3 - 1,6 | 1,2  | 0,6  |      | 84      |
| 77 21      | 115    | 0,3 - 1,3 | 1,0  |      |      | 84      |
|            | 130    | 0,3 - 1,6 | 1,3  |      |      | 84      |
| 77 22      | 115    | 0,3 - 1,3 | 1,0  |      |      | 84 / 85 |
|            | 130    | 0,3 - 2,0 | 1,5  |      |      | 84      |
| 77 32      | 115    | 0,3 - 1,3 | 1,0  | 0,5  |      | 84 / 85 |
| 77 42      | 115    | 0,3 - 1,3 | 0,8  |      |      | 84 / 85 |
|            | 130    | 0,3 - 1,6 | 1,3  |      |      | 84      |
| 77 52      | 115    | 0,3 - 1,0 | 0,8  | 0,5  |      | 84 / 85 |
| 77 72      | 115    | 0,3 - 0,8 |      |      |      | 84 / 85 |
| 78 03/13   | 125    | 0,2 - 1,6 | 1,0  |      |      | 86 / 88 |
| 78 23      | 125    | 0,2 - 1,0 | 0,6  |      |      | 86      |
| 78 31/41   | 125    | 0,2 - 1,0 |      |      |      | 86      |
| 78 61/71   | 125    | 0,2 - 1,6 | 1,2  |      |      | 86 / 88 |
| 78 81/91   | 125    | 0,2 - 1,6 | 1,2  | 0,6  |      | 86      |
| 79 02      | 120    | 0,2 - 1,4 | 1,0  | 0,6  |      | 90 / 91 |
| 79 02      | 125    | 0,2 - 1,7 | 1,3  | 0,7  |      | 90 / 91 |
| 79 12      | 125    | 0,3 - 1,7 | 1,3  | 1,0  | 0,6  | 90 / 91 |
| 79 22      | 120    | 0,1 - 1,3 | 0,8  |      |      | 90 / 91 |
| 79 22      | 125    | 0,1 - 1,7 | 1,0  |      |      | 90 / 91 |
| 79 32      | 125    | 0,2 - 1,5 | 1,1  | 0,6  |      | 90 / 91 |
| 79 42      | 125    | 0,1 - 1,5 | 0,8  |      |      | 90 / 91 |
| 79 52      | 125    | 0,2 - 1,3 | 0,9  | 0,5  |      | 90 / 91 |
| 79 62      | 125    | 0,1 - 1,3 | 0,8  |      |      | 90 / 91 |
| 99 0       | 200    |           | 1,8  | 1,4  |      | 64      |
|            | 220    |           | 2,4  | 1,6  |      | 64      |
|            | 250    |           | 2,4  | 1,6  |      | 64      |
|            | 280    |           | 2,8  | 1,8  |      | 64      |
|            | 300    |           | 3,1  | 1,8  |      | 64      |
| 99 1       | 250    |           | 3,3  | 1,8  |      | 65      |
|            | 300    |           | 3,8  | 2,0  |      | 65      |

### **SYMBOLS**

|           | flat jaws                                   | ≫ | with lead catcher                      |               |
|-----------|---|---|--|---------------|
| θ         | half-round jaws                             | X | angle                                  | <b>X</b> \$K  |
| 8         | round jaws                                  |   |  |               |
|           | flat and pointed jaws                       |   |  |               |
| <u> </u>  | box joint                                   |   |  | <u> </u>      |
| 53        | bolted joint                                |   | centre cutter                          |               |
| $\Box$    | smooth gripping surfaces                    |   | cutting edges with bevel               | 습1000 V       |
|           | serrated gripping surfaces                  |   | cutting edges with small bevel         | Œ             |
| $\otimes$ | cross-hatched, knurled<br>gripping surfaces |   | cutting edges with very<br>small bevel |               |
| MM        | with opening spring                         |   | cutting edges without bevel            |               |
|           | 1   |   |  | <del>کر</del> |

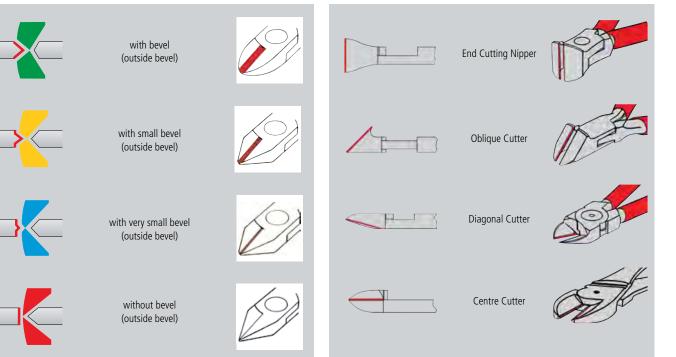
|                 | electrostatic discharging, dissipative  | ΔÅ         |    | weight                     |   |
|-----------------|---|------------|----|----------------------------|---|
| X               | electronics   | <b>-</b>   | •  | length                     |   |
| r<br>R          | VDE tested, also in<br>conformance to GPSG<br>(Equipment and Product<br>Safety Act) |            |    |                            |   |
| <u>}</u> 1000 V | insulated according to<br>IEC 60900, usable up to<br>1000 V AC/1500 V DC            | $\bigcirc$ | S  | oft wire                   |   |
| ≩1000 V         | insulated according to<br>DIN VDE 0680/1, suitable                                  | $\bigcirc$ | m  | nedium haro                | d |
|                 | for the application up to<br>1000 V AC / 1500 V DC                                  |            | h  | ard wire                   |   |
| CE              | conforms to a European directive  |            | р  | iano wire                  |   |
|                 | mechanically tested in<br>accordance with the<br>equipment and product              | €          |    | u + Al mult<br>, solid and |   |
|                 | safety act<br>WEEE marking (Waste   |            | w  | vire rope                  |   |
| X               | Electrical and Electronic<br>Equipment Directive)                                   | Fe         | ir | on                         |   |
|                 |   |            |    |                            |   |



# **CUTTING EDGES** TECHNICAL BASICS

### **CUTTING EDGE SHAPES CONFORMING TO DIN ISO 5742**

### **DIRECTION AND POSITION OF CUTTING EDGES**

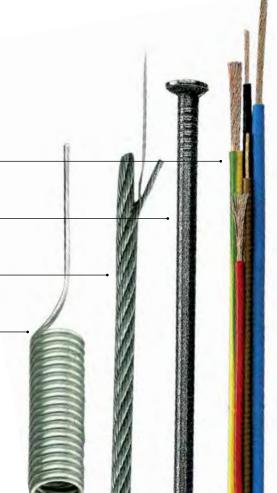


**Safety instruction** Each tool should only be used for its specified purpose. When using cutting pliers: beware of wire ends flying off. Wear protective goggles and - if needed - gloves. Be aware of bystanders! Only handles marked in the particulation with the symbol  $\bigstar$  1000 V are insulating.



### WIRE CLASSES

|           | Material examples               | Type of wire | Tensile           | strength |
|-----------|---------------------------------|--------------|-------------------|----------|
|           |                                 |              | N/mm <sup>2</sup> | kp/mm²   |
| $\bullet$ | Copper, plastics                | soft         | 220               | 22       |
|           | Nail, wire pin                  | medium-hard  | 750               | 75       |
|           | Wire rope strand,<br>steel wire | hard         | 1800              | 180      |
|           | Spring steel wire               | piano wire   | 2300              | 230      |



# **ARTICLE NUMBER**



### STRUCTURE OF ARTICLE NUMBER HEAD/HANDLES

| Basic mod<br>e.g.:<br>Combinat<br>Pliers                              |  | Finish<br>e.g.:<br>head polis-<br>hed, handles<br>black atra-<br>mentized | Length<br>e.g.:<br>180 mm | 0 | Pliers black<br>atramentized,<br>head polished                         |              |
|---|--|---|---------------------------|---|--|--------------|
| 03  | 0  | 0   | 180                       | 1 | Head polished,<br>handles plastic<br>coated                            |              |
|   |  |   |                           | 2 | Head polished,<br>handles with multi-<br>component grips               |              |
|   |  |   |                           | 3 | Pliers chrome plated,<br>handles plastic<br>coated                     |              |
|   |  |   |                           | 4 | Pliers chrome plated   |              |
| Registered<br>of the com  | Trademarks<br>panies                                     |   |                           | 5 | Pliers chrome plated,<br>handles with multi-<br>component grips        |              |
| Con-Pearl <sup>®</sup>  | PARAT-WERK<br>Schönenbach<br>GmbH + Co. KG               |   |                           | 6 | Pliers chrome plated,<br>handles insulated with                        |              |
| Duspol®   | Benning, Elektrotechn<br>and Elektronik<br>GmbH & Co. KG | ik  |                           |   | multi-component grips,<br>VDE-tested                                   |              |
| gesis®  | Wieland Electric Gmbl                                    |   |                           |   | DIN EN/IEC 60900   | A 1000 V     |
| Kapton <sup>®</sup> ,<br>KEVLAR <sup>®</sup> ,<br>Teflon <sup>®</sup> | E. I. du Pont de<br>Nemours and Compar                   | ıy  |                           | 7 | Pliers chrome plated,<br>handles with dipped<br>insulation, VDE-tested |              |
| Radox®  | HUBER+SUHNER AG  |   |                           |   | DIN EN/IEC 60900   | Hill Carry I |
| Phillips®   | Phillips Screw Compar                                    | лy  |                           |   |  |              |
| Pozidriv®   | European Industrial<br>Service Ltd.                      |   |                           |   |  |              |
| systainer®  | TANOS GmbH   |   |                           |   |  |              |
| MC®   | Multi-Contact AG   |   |                           |   |  |              |
| Solarlok®   | Tyco Electronics   |   |                           |   |  |              |

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| al Grip Pliers |  |
|----------------|--|

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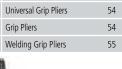
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Cutters

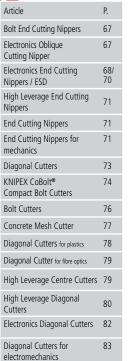
Cutters ESD

**GRIP** 

P.

**PLIERS** 





Electronics Diagonal Cutters

Electronics Diagonal Cutters

Electronic Super Knips® ESD 88

Precision Electronics Diagonal 90

Precision Electronics Diagonal 91

Electronic Super Knips®



|          | WR    | EN | Cŀ | łE  | S |
|----------|-------|----|----|-----|---|
| le       |       |    |    | P.  |   |
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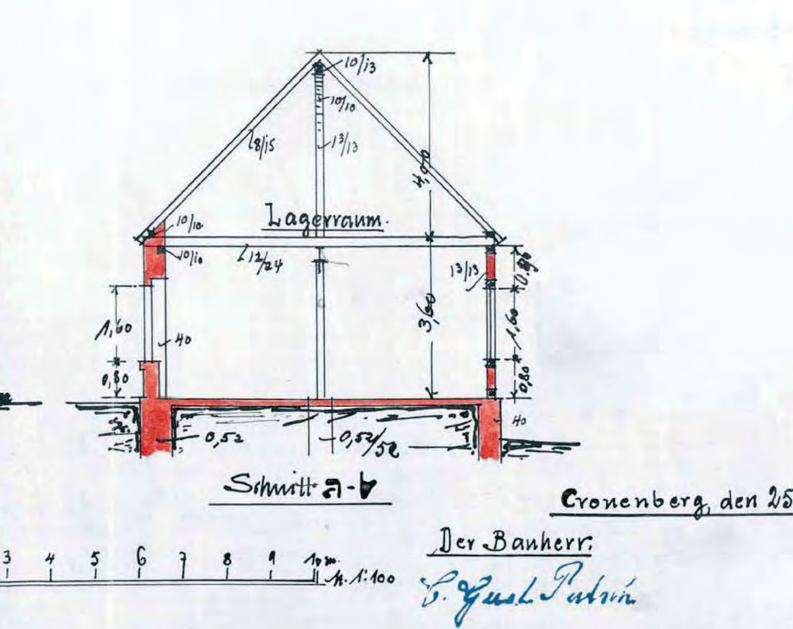
### THE RANGE OF PRODUCTS



Ran

zu einer Schmiedewerkstelle Fin Herr Gust Putsch Oberkamp bei Cronenberg.





# HOW EVERYTHING BEGAN – AND A SIMPLE PRINCIPLE





**1882** Carl Gustav Putsch set up his own small forge shop in Cronenberg (now a part of Wuppertal).

**1922** Carl Putsch takes over management. The company develops into an industrial firm.

**1942** KNIPEX, the brand, is created and registered.

**1954** Karl Putsch (photo left), the grandson of the company founder, takes over management of the family-owned company. Numerous innovations and modern production technology characterise the development.

**1987** Ralf Putsch joins the company. International sales are seriously expanded. Other tool manufacturers become part of the KNIPEX Group.

Carl Gustav Putsch wanted to stand on his own two feet after completing his apprenticeship as blacksmith with his father. He therefore set up his own business in 1882 and forged carpenters' and farriers' pincers with two journeymen, 60 pieces per day. The other processes were also carried out in careful manual labour. The quality was sought after, the small enterprise grew.

The next generations were able to build continuously on these foundations. We have retained an independent family-owned company up to the present day. A lot has changed since the first years. Over time, the workshop turned into a factory with modern machinery and continuously improving technology. New types of pliers and pioneering innovations were added. The number of supplied countries grew steadily.

However, our fundamental principle has stayed in place: remain faithful to a product group, concentrate all strengths on it and be "simply the best" in pliers. Don't get side-tracked, instead create more performance and quality in a single segment. This is what KNIPEX stands for as today's leading brand in pliers.



# FOR WHOM WE MAKE PLIERS

They are constantly in our mind: People who work with tools professionally. Who need to be able to rely on their tools, even when the going gets tough. Who expect their tools to last a long time. In other words: Users who are demanding in every respect and who want only the best.

We offer these users a range of around 1,000 different pliers. With this choice we can provide exactly the right tool for every application - and always in a suitable design and size.

Because the verdict of the professionals is our benchmark, we are always looking for their feedback. About how they work with their pliers and what's important to them, so that we can understand precisely and in detail what matters to them.

Paramount is to know what makes their work easier, quicker and safer. That is, the subject of ergonomics, adapting working appliances to their users. Despite high performance, tools should never stress a user more than necessary. Here, for example, the good design of pliers handles is not the only criterion. We always find new ways of saving strength and relieving the whole hand-arm system.





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# **QUALITY IN EVERY DETAIL**





Sometimes we give our pliers a really hard time. We try to destroy them to find out what makes them good and long-lasting. Because we don't want to leave anything to chance, we take a long, careful look.

Many trials, for example, have shown us that high-leverage diagonal cutters for very hard wire should be alloyed at best with 0.8 % carbon and certain defined parts of chromium and vanadium.

Correctly hardened, this steel guarantees optimum cutting performance and service life. That's why we use it for our pliers – even if it has to be produced especially for us, costs more and is hard to process. But our high product demands require this.

The rivet of the high-leverage diagonal cutter also has to stand up to a lot of stress. That's why we literally give it backup: we forge it straight onto the pliers. This means extra effort – we have to precision mill the rivet to a few hundredth millimeters. Satisfied users are worth this effort.

And then there are, no less important: the angles, the sharpness, the hardness, the toughness of the cutting edges. The precision and smooth movement of the joint. The handle design and the finish: we keep reviewing these subjects, we research, test and improve.

# MADE IN WUPPERTAL, GERMANY

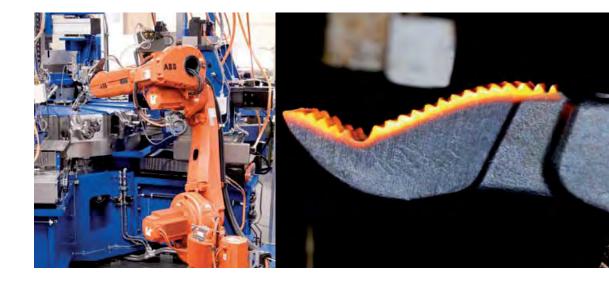
A lot has to come together so that we can make the best pliers. First of all, the special material. Then: modern processing methods and machines. We want to work with high precision and efficiently at all times.

The machines we require for our special needs are not always available on the market. Then we construct these ourselves. Our mechanical engineers come up with state-of-the-art solutions even for tricky tasks.

And last but not least: our employees. With their comprehensive experience, their knowledge and skills they make sure that everything turns out precisely as our customers expect. So that we can keep the KNIPEX promise.

Our pliers run through many production steps which are all carefully coordinated. From forging to machining, hardening, surface finishing and all the way to packing, these steps are all carried out under the one roof. This means that we can have a direct and complete influence on how our products are created.

The short distances allow us to respond quickly and implement improvements immediately.

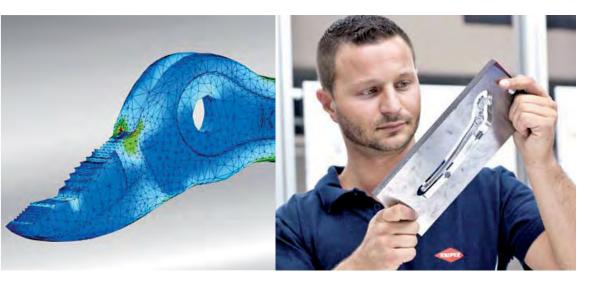






# THE THINK TANK





When we have achieved something we are happy – but we don't stop there. For us, better is the enemy of the good. And we like to be the first to have the good ideas for better pliers.

We continuously work on new products and product advantages which offer our users tangible added value. For example by saving handforce when cutting or they can adjust pliers for gripping quicker and with more precision. Or they can do without a heavy tool because a more compact one can do the same job.

No matter whether it's a small improvement or a totally new idea: everything is meticulously thought out and designed with state-of-the-art software. New models are then put through the acid test – with the help of computer simulations in the test lab and in user testing. The results are then used to further optimise the product, it is re-tested and finally released for production.

By the time they're on the market our pliers have already come a long, hard way.



# **OUR CUSTOMERS**

Reliably, confidently and long-term – this is how we wish to collaborate with our customers. We have been doing precisely this for decades with many of them. We offer high quality, performance, good service and contact partners who know what it's all about. We want working with us to be easy and pleasant.

Our brand is known and appreciated by consumers. We offer various support for the sale of our products. We visit users together with our distributors to present our tools. We train our partners' field salesforce because a lot can be said about our pliers which the salesperson can use as convincing arguments.



Our understanding of partnership also means that we do not sell directly to end users. And there are no exceptions.

Today, customers in more than 100 countries bank on our products. We reach them via a constantly enlarging, worldwide network of agencies, our own subsidiaries and importers. By observing the many markets we can gain insights and discover important trends, which will be beneficial to the up-to-dateness and competence of our range. Our customers also benefit from this.



# PINZE ALICATES FOG КЛЕЩИ ZANGE S Æ JGER TANG CATE πένσα الكم KLEŠTĚ KLIJEŠTA KERPETE Ν 钳子 PINCES



# OUR VALUES – OUR EMPLOYEES



We want to be successful and do a lot to achieve this. But we don't want economic success at any price and not at the expense of values which are important to us.

Our aspirations are to act and operate sustainably. The longevity of our products is only one aspect of many.

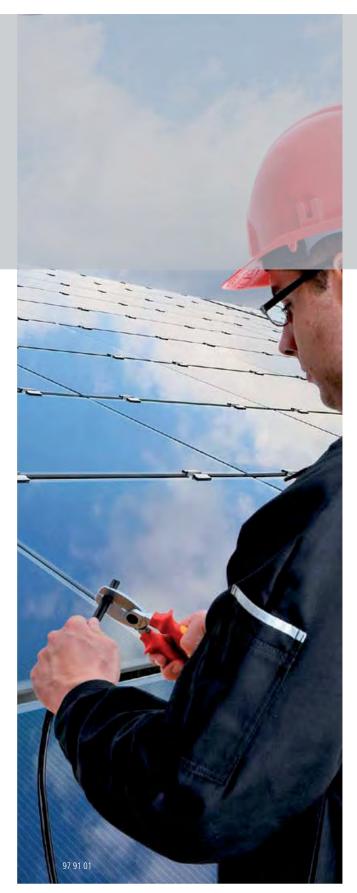
We feel closely linked with our location. That is why we are particularly aware that we have a responsibility towards our environment and society – and thereby our future generations. We want to treat resources carefully and not burden nature more than absolutely necessary.

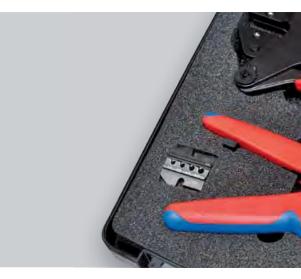
We engage ourselves in many ways in our sphere, in particular in the sectors of education, social policy and culture.

Our employees are particularly important to us. They provide the basis for our success with their knowledge and skills, their commitment and ideas. We train them very thoroughly and support them when they want to develop themselves and learn something new. We put emphasis on a good an fair cooperation and know that we can only attain our high targets jointly.









There is a steadily increase of electrical power produced by photovoltaic plants (PV systems). The output from this environmentally friendly source of energy rises each year by about 20 % worldwide. However, the share in the total power generation is still below 0.3 % worldwide, which means there is still rich potential for growth. This makes photovoltaic a profitable sphere of activities for trade and for electrical contractors.

The photovoltaic tools from KNIPEX, customized for cutting, stripping and crimping the special photovoltaic cables and connectors, offer professional and reliable work results and ensure that the relevant requirements, such as e.g. Ral GZ 966, are met.

The requirements for a technically perfect installation of the photovoltaic systems are very high. It is a demanding task to create an electrically efficient and constantly reliable connection in combination with high mechanical requirements.





for contacts from:

### Huber + Suhner Multi-Contact Hirschmann Tyco Wieland and others

Tool Case for Photovoltaics

Article No. 97 91 01: all tools required for assembly in one case equipped with crimping dies for standard solar cable connectors

### SPECIAL PHOTOVOLTAIC RANGE FROM KNIPEX



Cut effected with a Cable Shears: easy, clean cut without any deformation of the cable.



High demands in terms of results require the use of high-quality special tools also. These must be adapted precisely to suit systems from various manufacturers.



As the systems are not compatible with each other, each type of connector requires a set of individual crimping dies. The range is completed by locators to support quick, easy and precise work.



## 01 Combination Pliers Chrome Vanadium

DIN ISO 5746 IEC 60900 DIN EN 60900



- 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, oil-hardened

|             |         |            |                  |               | Pliers  | Handles | Cutting capacities |      |      |     |  |
|-------------|---------|------------|------------------|---------------|---|---------|--------------------|------|------|-----|--|
| Article No. | 1003773 | <b>∢</b> ▶ | Pliers           | $\bigcirc$    |   |         | $\bigcirc$         |      | •    | 52  |  |
|             |         | mm         |                  |               |   | Ømm     | Ømm                | Ømm  | mm²  | g   |  |
| 01 06 160   | 040729  | 160        | A 1000 V 🖓 🖨 🏧 🕨 | chrome plated | insulated with multi-<br>component grips,<br>VDE-tested | 2.0     | 1.5                | 10.0 | 16.0 | 220 |  |
| 01 06 190   | 040415  | 190        | 1000 V 🖄 🔁 🏧 🕅 🔽 |               |   | 2.5     | 2.0                | 13.0 | 25.0 | 320 |  |



- 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 electric steel; forged, oil-hardened

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers        | Handles                    |     |     | apacities<br>Ø mm |      | ۲۵<br>g |
|-------------|-----------------|-----------------|---------------|----------------------------|-----|-----|-------------------|------|---------|
| 08 05 110   | 034957          | 110             | chrome plated | with multi-component grips | 2.5 | 1.6 | 9.0               | 10.0 | 85      |

08 05 110



02 07 225 <u>A</u> 1000 V AGE IIII ► 4

|             |          |     |                             |                    |          |  |     | Cutting c  | apacities |                 |     |
|-------------|----------|-----|-----------------------------|--------------------|----------|--|-----|------------|-----------|-----------------|-----|
| Article No. | EAN      | ->  |                             | Pliers             | Head     | Handles                                    |     | $\bigcirc$ |           |                 | 52  |
|             | 4003773- | mm  |                             |                    |          |  | Ømm | Ø mm       | Ømm       | mm <sup>2</sup> | g   |
| 02 01 180   | 033134   | 180 |                             |                    |          |  | 2.5 | 2.0        | 11.5      | 16.0            | 202 |
| 02 01 200   | 039679   | 200 |                             | black atramentized | polished | plastic coated                             | 2.8 | 2.2        | 13.0      | 25.0            | 298 |
| 02 01 225   | 013198   | 225 |                             |                    |          |  | 3.0 | 2.5        | 14.0      | 25.0            | 358 |
| 02 02 180   | 034896   | 180 |                             |                    |          | al la s                                    | 2.5 | 2.0        | 11.5      | 16.0            | 240 |
| 02 02 200   | 034902   | 200 |                             | black atramentized | polished | with multi-component grips                 | 2.8 | 2.2        | 13.0      | 25.0            | 342 |
| 02 02 225   | 043379   | 225 |                             |                    |          | 91123                                      | 3.0 | 2.5        | 14.0      | 25.0            | 409 |
| 02 05 180   | 043072   | 180 |                             |                    |          | with multi component                       | 2.5 | 2.0        | 11.5      | 16.0            | 238 |
| 02 05 200   | 043089   | 200 |                             | chrome plated      |          | with multi-component<br>grips              | 2.8 | 2.2        | 13.0      | 25.0            | 342 |
| 02 05 225   | 010005   | 225 |                             |                    |          |  | 3.0 | 2.5        | 14.0      | 25.0            | 400 |
| 02 06 180   | 010012   | 180 |                             |                    |          | insulated with                             | 2.5 | 2.0        | 11.5      | 16.0            | 247 |
| 02 06 200   | 010029   | 200 | £ 1000 V @ 🚰 💷              | chrome plated      |          | multi-component                            | 2.8 | 2.2        | 13.0      | 25.0            | 343 |
| 02 06 225   | 010036   | 225 |                             |                    |          | grips, VDE-tested                          | 3.0 | 2.5        | 14.0      | 25.0            | 401 |
| 02 07 200   | 022299   | 200 |                             | chromo platod      |          | with plastic dipped insulation, VDE-tested | 2.8 | 2.2        | 13.0      | 25.0            | 380 |
| 02 07 225   | 022305   | 225 | <u>A</u> 1000 V @ 🚰 💷 🕅 ▶ ◄ | chrome plated      |          |  | 3.0 | 2.5        | 14.0      | 25.0            | 486 |

# 03 **Combination Pliers** • with gripping zones for flat and round material, suitable for versatile use DIN ISO 5746 • 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, oil-hardened 03 01 180 III 💌 03 02 180 IIII 💌 03 05 180 IIII 💌 03 06 180 £1000V @€ আ∭ ▶◀

|             |                 |     |                         |                    |                                 |                               |      | Cutting o | apacities |                 |         |
|-------------|-----------------|-----|-------------------------|--------------------|---------------------------------|-------------------------------|------|-----------|-----------|-----------------|---------|
| Article No. | EAN<br>4003773- | l   |                         | Pliers             | Head                            | Handles                       | Ø mm | Ø mm      | Ø mm      | mm <sup>2</sup> | ۲۵<br>g |
| 03 00 180   | 015161          | 180 |                         |                    |                                 |                               | 3.4  | 2.2       | 12.0      | 16.0            | 205     |
| 03 00 200   | 015178          | 200 |                         | black atramentized | polished                        |                               | 3.8  | 2.5       | 13.0      | 16.0            | 255     |
| 03 00 250   | 015185          | 250 |                         |                    |                                 |                               | 3.8  | 2.5       | 15.0      | 25.0            | 444     |
| 03 01 140   | 015192          | 140 |                         |                    |                                 |                               | 2.8  | 1.8       | 9.0       | 10.0            | 112     |
| 03 01 160   | 013235          | 160 |                         |                    |                                 |                               | 3.1  | 2.0       | 10.0      | 16.0            | 187     |
| 03 01 180   | 013242          | 180 |                         | black atramentized | polished                        | plastic coated                | 3.4  | 2.2       | 12.0      | 16.0            | 216     |
| 03 01 200   | 013259          | 200 |                         |                    |                                 |                               | 3.8  | 2.5       | 13.0      | 16.0            | 276     |
| 03 01 250   | 015222          | 250 |                         |                    |                                 |                               | 3.8  | 2.5       | 15.0      | 25.0            | 489     |
| 03 02 160   | 023203          | 160 |                         | black atramentized | polished                        | with multi-com-               | 3.1  | 2.0       | 10.0      | 16.0            | 223     |
| 03 02 180   | 023197          | 180 |                         |                    |                                 | ponent grips                  | 3.4  | 2.2       | 12.0      | 16.0            | 254     |
| 03 02 200   | 034940          | 200 |                         |                    |                                 | ponent grips                  | 3.8  | 2.5       | 13.0      | 16.0            | 322     |
| 03 05 140   | 039730          | 140 |                         | chrome plated      | with multi-com-<br>ponent grips | 2.8                           | 1.8  | 9.0       | 10.0      | 139             |         |
| 03 05 160   | 039518          | 160 |                         |                    |                                 | the management                | 3.1  | 2.0       | 10.0      | 16.0            | 222     |
| 03 05 180   | 034933          | 180 |                         | chiome plated      |                                 |                               | 3.4  | 2.2       | 12.0      | 16.0            | 254     |
| 03 05 200   | 041146          | 200 |                         |                    |                                 |                               | 3.8  | 2.5       | 13.0      | 16.0            | 324     |
| 03 06 160   | 021902          | 160 |                         |                    |                                 | insulated with                | 3.1  | 2.0       | 10.0      | 16.0            | 228     |
| 03 06 180   | 021926          | 180 | 🛧 1000 V 🖄 🚰 🏧 🕨 🗨      | chrome plated      |                                 | multi-com-<br>ponent grips,   | 3.4  | 2.2       | 12.0      | 16.0            | 264     |
| 03 06 200   | 033776          | 200 |                         |                    |                                 | VDE-tested                    | 3.8  | 2.5       | 13.0      | 16.0            | 326     |
| 03 07 160   | 015307          | 160 |                         |                    |                                 |                               | 3.1  | 2.0       | 10.0      | 16.0            | 254     |
| 03 07 180   | 015314          | 180 | A 1000 V 🖉 🛋 🛲 🕅        | chromo plated      |                                 | with plastic dip-             | 3.4  | 2.2       | 12.0      | 16.0            | 285     |
| 03 07 200   | 015321          | 200 | <b>☆ 1000 V ﷺ</b> ← chi | chrome plated      |                                 | ped insulation,<br>VDE-tested | 3.8  | 2.5       | 13.0      | 16.0            | 339     |
| 03 07 250   | 015345          | 250 |                         |                    |                                 |                               | 3.8  | 2.5       | 15.0      | 25.0            | 597     |

### Lineman's Pliers

#### American style

09

DIN ISO 5746 ASME B107.20



- solid construction for heaviest strain; universally applicable
- high transmission ratio for easy cutting
- requires 40 % less effort compared with conventional combination pliers thanks to optimised transmission ratio
- 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 electric steel; forged, oil-hardened

#### 09 11 240 / 09 12 250

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





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



Gripping zone below the joint for powerful leverage



Long cutting edges for cutting flat cables

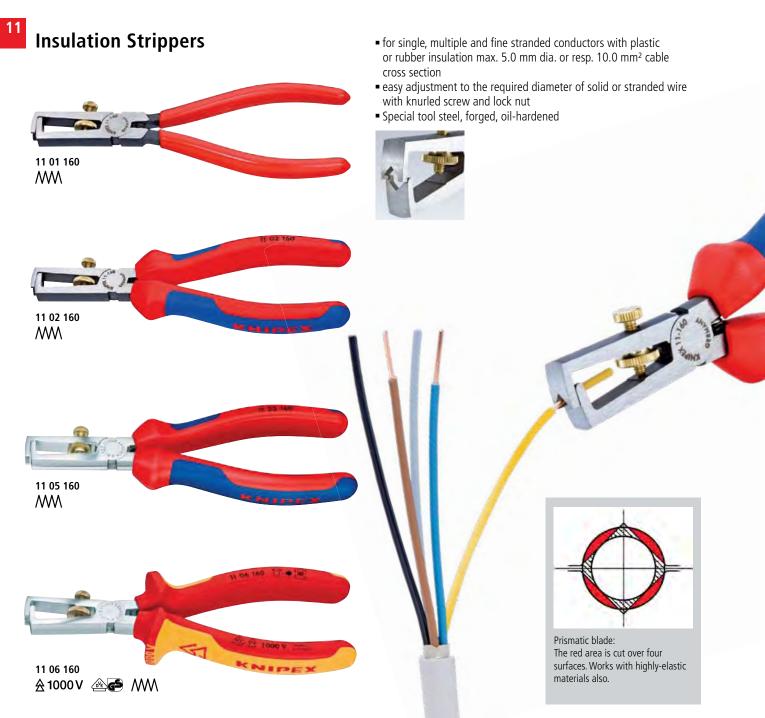


09 11/12 240: fish tape puller in the joint gap

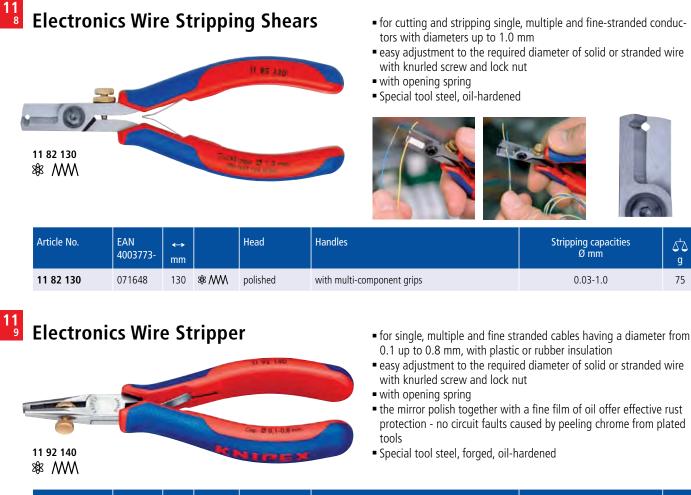


09 11/12 240: universal mandrel crimping area below the joint

| Article No. | EAN<br>4003773- | <b>→</b><br>mm | Pliers             | Head     | Handles                       | Cutting c | capacities<br>Ø mm | ۲۵<br>g |
|-------------|-----------------|----------------|--------------------|----------|-------------------------------|-----------|--------------------|---------|
| 09 01 240   | 064992          | 240            | black atramentized | polished | with non-slip plastic coating | 4.6       | 3.0                | 435     |
| 09 02 240   | 065005          | 240            | black atramentized | polished | with multi-component grips    | 4.6       | 3.0                | 470     |
| 09 11 240   | 071952          | 240            | black atramentized | polished | with non-slip plastic coating | 4.6       | 3.0                | 435     |
| 09 12 240   | 071969          | 240            | black atramentized | polished | with multi-component grips    | 4.6       | 3.0                | 470     |



| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |                           | Pliers                | Head     | Handles   | Stripping<br>Ø mm | capacities<br>mm² | AWG | ۲<br>ع |
|-------------|-----------------|----------------|---------------------------|-----------------------|----------|---|-------------------|-------------------|-----|--------|
| 11 01 160   | 013556          | 160            | MM                        | black<br>atramentized | polished | plastic coated                                      | 5.0               | 10.0              | 7   | 131    |
| 11 02 160   | 023180          | 160            | MM                        | black<br>atramentized | polished | with multi-component grips                          | 5.0               | 10.0              | 7   | 165    |
| 11 05 160   | 039570          | 160            | MM                        | chrome plated         |          | with multi-component grips                          | 5.0               | 10.0              | 7   | 157    |
| 11 06 160   | 021933          | 160            | ≙ 1000 V 🖄 🗲<br>MM        | chrome plated         |          | insulated with multi-component grips,<br>VDE-tested | 5.0               | 10.0              | 7   | 166    |
| 11 07 160   | 015499          | 160            | <b>会 1000 V @</b> €<br>MM | chrome plated         |          | with plastic dipped insulation, VDE-<br>tested      | 5.0               | 10.0              | 7   | 180    |
| 11 12 160   | 034964          | 160            |                           | black<br>atramentized | polished | with multi-component grips                          | 5.0               | 10.0              | 7   | 156    |
| 11 15 160   | 042471          | 160            |                           | chrome plated         |          | with multi-component grips                          | 5.0               | 10.0              | 7   | 155    |
| 11 17 160   | 015505          | 160            | <b>☆1000 V 🖄 🚭</b>        | chrome plated         |          | with plastic dipped insulation, VDE-<br>tested      | 5.0               | 10.0              | 7   | 181    |



| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |      | Head            | Handles                    | Stripping capacities<br>Ø mm | ۲۵<br>g |
|-------------|-----------------|------------------|------|-----------------|----------------------------|------------------------------|---------|
| 11 92 140   | 016908          | 140              | ≫ MM | mirror polished | with multi-component grips | 0.1 - 0.8                    | 99      |

12

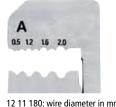
### Insulation Strippers with shaped blades



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

for cutting and stripping single, multiple and fine-stranded conduc-

- 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





12 11 180: wire diameter in mm

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

| Article No.  | EAN<br>4003773- | <b>↔</b><br>mm |         | Pliers                 | Handles            | Stripping capacities<br>Ø mm | Stripping capacities<br>mm <sup>2</sup>   | AWG                            | ۲<br>ع |
|--|-----------------|----------------|---------|------------------------|--------------------|------------------------------|---|--------------------------------|--------|
| 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 / 1.0 / 1.5 /<br>2.5 / 4.0 / 6.0 | 20-19 / 17 /15 /<br>13 /11/ 10 | 366    |
| 12 19 180  | 022145          | 1 nair         | of snar | e blades for 12 11 180 |                    |                              |   |                                |        |
| <b>12 29 180</b> 022152 1 pair of spare blades for 12 21 180 |                 |                |         |                        |                    |                              |   |                                |        |

52

q

75

# Precision Insulation Strippers

### with adapted blades

(PATENTED)







12 12 06 MM



12 12 11 MM

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





12 12 06



12 12 11



12 12 12

-10.0

60

10

| 12 12 06    |                 |                | 12 12 1                      | 0 1                       | 2 12 11                    | 12 12 12                                |         |        |  |  |  |  |
|-------------|-----------------|----------------|------------------------------|---------------------------|----------------------------|---|---------|--------|--|--|--|--|
| Article No. | EAN<br>4003773- | <b>→</b><br>mm |                              | Pliers                    | Handles                    | Stripping capacities<br>mm <sup>2</sup> | AWG     | ۲<br>g |  |  |  |  |
| 12 12 02    | 048077          | 195            |                              |                           |                            | 0.03 - 2.08                             | 32 - 14 | 447    |  |  |  |  |
| 12 12 06    | 049005          | 195            | MM                           | burnished                 | with multi-component grips | 0.14 - 6.00                             | 26 - 10 | 445    |  |  |  |  |
| 12 12 10    | 049012          | 195            |                              |                           |                            | 2.5 - 10.0                              | 13 - 7  | 445    |  |  |  |  |
| 12 12 11    | 062998          | 195            |                              | burnished                 | with multi component gring | 1.5 - 6.0                               | 15 - 10 | 449    |  |  |  |  |
| 12 12 12    | 073758          | 195            | MM                           | burnished                 | with multi-component grips | 4.0 - 10.0                              | 11 - 7  | 450    |  |  |  |  |
|             |                 |                |                              |                           |                            |   |         |        |  |  |  |  |
| 12 19 02    | 049036          | 1 set c        | of spare bl                  | ades for 12 12 02         |                            |   |         |        |  |  |  |  |
| 12 19 06    | 049043          | 1 set c        | of spare bl                  | ades for 12 12 06         |                            |   |         |        |  |  |  |  |
| 12 19 10    | 049050          | 1 set c        | of spare blades for 12 12 10 |                           |                            |   |         |        |  |  |  |  |
| 12 19 11    | 063001          | 1 set c        | of spare bl                  | spare blades for 12 12 11 |                            |   |         |        |  |  |  |  |
| 12 19 12    | 073765          | 1 set c        | of spare bl                  | ades for 12 12 12         |                            |   |         |        |  |  |  |  |

#### **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.



- form-fit stripping also of difficult-to-remove insulating materials such as Teflon®, silicone, Radox®, Kapton® and rubber; multi-layer too
- a second pair of blades holds the remaining insulation reliably in place
- blades are shaped precisely to the respective conductor cross-section
- with an adjustable length stop when cutting the same stripping lengths during repetitive work
- Pliers body: steel
- Blade: special tool steel, oil-hardened

#### 12 12 02

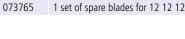
with additional cable guide for exact positioning of the cable in the stripping area of the blade

### 12 12 11 /

12 12 12 for solar cables specially adapted to multi-layered and Radox<sup>®</sup> insulation; with additional cable support for a better centring of multi-layer insulated conductors in the stripping profiles









#### 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 materials such as Teflon $^{\otimes}$ , Radox $^{\otimes}$  and multilayer insulations.



12 12 02 with cable guide and length stop



Precise cutting of the insulation to a complete extent



Positive stripping thanks to precise shape of the blades



Automatic stripping of the insulation



# Self-Adjusting Insulation Strippers



- 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 10.0 mm<sup>2</sup> and single stranded up to 6.0 mm<sup>2</sup>
- smoothly operating mechanism
- stripping blades and clamping jaws easily replaceable
- Iow weight
- Body: plastic, fibreglass-reinforced
- Blade: special tool steel, oil-hardened

### **12 40 200** for this ribbon

for thin ribbon cables up to 10.0 mm width in a single pass





Wire cutter for multiple stranded wire cables up to 10.00  $\mbox{ mm}^2$ 



Adjustable length stop



Precise stripping prevents damage to the conductor

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                                      | Stripping capacities<br>mm <sup>2</sup> | AWG    | Length stop<br>mm | ۵ <sup>۲</sup> ۵<br>g |  |  |
|-------------|-----------------|-----------------|--------------------------------------|---|--------|-------------------|-----------------------|--|--|
| 12 40 200   | 026662          | 200             | MM                                   | 0.03 - 10.0                             | 32 - 7 | 3.0 - 18.0        | 202                   |  |  |
| 12 50 200   | 034407          | 200             | MM                                   | 2.5 - 16.0                              | 13 - 5 |                   | 200                   |  |  |
|             |                 |                 |                                      |   |        |                   |                       |  |  |
| 12 49 01    | 026679          | 1 pair          | of spare blades for 12 40 200        |   |        |                   |                       |  |  |
| 12 49 02    | 026686          | 1 pair          | of spare clamping jaws for 12 40 200 |   |        |                   |                       |  |  |
| 12 49 03    | 026693          | Spare           | are length stop for 12 40 200        |   |        |                   |                       |  |  |
| 12 59 01    | 034414          | 1 pair          | of spare blades for 12 50 200        |   |        |                   |                       |  |  |
| 12 59 02    | 034421          | 1 pair          | of spare clamping jaws for 12 50 200 |   |        |                   |                       |  |  |

# KNIPEX MultiStrip 10

#### **Automatic Insulation Stripper**

PATENTED



#### Mode of operation of straight cutters

Models 12 40 200 and 12 42 195

An incision is made in the red area only.

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

#### 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.

#### Stripping without re-adjustment from 0.03 to 10.0 mm<sup>2</sup>

- fully automatic adjustment to commercially used single-, multi- and fine-stranded conductors with standard insulation throughout the entire capacity range from 0.03 to 10.0 mm<sup>2</sup>
- no manual fine adjustment required, no damage to the conductors
- the clamping jaws made of steel with integrated cutting edge hold the cable in a way that prevents slipping without damaging the remaining insulation
- with wire cutter for copper and aluminium conductors, multistranded up to 10.0 mm<sup>2</sup> and single-stranded up to 6.0 mm<sup>2</sup>
- 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



Wire cutter for multiple stranded wire cables up to 10.0 mm<sup>2</sup>



Steel restrain jaws with cutting edges avoid skidding of the cable



Precise stripping from 0.03 to 10.0 mm<sup>2</sup> without re-adjustment

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |            | Stripping capacities<br>mm <sup>2</sup> | AWG    | ۲<br>g |
|-------------|-----------------|-----------------|------------|---|--------|--------|
| 12 42 195   | 054580          | 195             | MM         | 0.03 - 10.0                             | 32 - 7 | 136    |
|             |                 |                 |            |   |        |        |
| 12 49 21    | 057581          | Spare           | blades blo |   |        |        |
| 12 49 23    | 057604          | Spare           | length sto | p for 12 42 195                         |        |        |



- compact standard tool at a favourable price for all current cable cross-sections and insulating materials
- for single, multiple and fine stranded cables of 0.2 up to 6.0 mm<sup>2</sup> with standard insulation
- 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 an aluminium wires up to 2.5 mm<sup>2</sup>
- 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



Wire cutter up to 2.5 mm<sup>2</sup>



Precise stripping from 0.2 up to 6.0 mm<sup>2</sup>



Stripping in confined areas

| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm |    | Stripping capacities<br>mm <sup>2</sup> | AWG     | ۲۵<br>g |
|-------------|-----------------|------------------|----|---|---------|---------|
| 12 62 180   | 054573          | 180              | MM | 0.2 - 6.0                               | 24 - 10 | 151     |

| 12 69 21 | 060093 | 1 pair of spare blades for 12 62 180 |
|----------|--------|--------------------------------------|
| 12 69 23 | 067115 | Spare length stop for 12 62 180      |

### Automatic Insulation Stripper for flat cable



12 64 180 MM

• for PVC insulated flat cables up to a max. 12 mm width and 0.75 to 2.5 mm<sup>2</sup>

- adapts automatically to the various conductor heights; prevents damage to the conductor
- long stripping lengths possible
- blade replaceable
- smoothly operating mechanism
- Iow weight
- Body: plastic, fibreglass-reinforced
- Blade: special tool steel, oil-hardened



| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |    | Stripping capacities<br>mm <sup>2</sup> | AWG     | ۲۵<br>g |
|-------------|-----------------|----------------|----|---|---------|---------|
| 12 64 180   | 073284          | 180            | MM | 0.75 - 2.5                              | 19 - 13 | 125     |
|             |                 |                |    |   |         |         |

12 69 31

# 12 Mini Stripping Tool

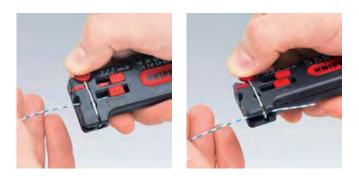


12 80 100 SB MM

- 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

#### 12 80 040 SB

for thin copper conductors dia. 0.12 to 0.4 mm



| Article No.  | EAN<br>4003773- | <b>←→</b><br>mm |      | Stripping capacities<br>Ø mm | AWG     | ۲۵<br>g |
|--------------|-----------------|-----------------|------|------------------------------|---------|---------|
| 12 80 040 SB | 071655          | 100             | M    | 0.12 - 0.4                   | 36 - 26 | 35      |
| 12 80 100 SB | 043119          | 100             | /\\\ | 0.30 - 1.0                   | 28 - 18 | 34      |

# <sup>12</sup> <sup>82</sup> Wire Stripper for fibre optics

- to remove primary and secondary coating of fibre optics
- Chrome vanadium electric steel in special quality, oil-hardened





| Article No.  | EAN<br>4003773- | <b>←→</b><br>mm | Pliers    | Handles              | Stripping capacities<br>Ø mm                          | ۲۵<br>g |  |
|--------------|-----------------|-----------------|-----------|----------------------|---|---------|--|
| 12 82 130 SB | 050094          | 130             | burnished | with plastic handles | primary-coating: 0.125 mm secondary-coating: 0.250 mm | 69      |  |

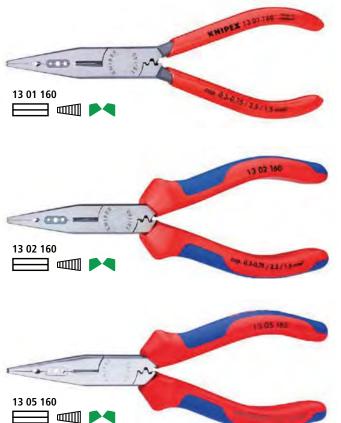
# Stripping Tool for fibre optics • to remove primary coating of fibre optics Ø 0.125 mm • blade dia. 0.18 mm, hole for cable feeding 0.30 mm dia. adjustable length stop Housing: plastic, impact-proof KNIPEX 12 85 100 Made in fi re Optic Strip 12 85 100 SB Stripping capacities Ø mm EAN **-**4003773mm 043126 100 to remove primary coating of fibre optics Ø 0.125 mm • the ideal pliers for cable work • for gripping and bending wire KHIPEX 13 with precision stripping holes 2-000 > 000 Gripping





13

### **Electricians' Pliers**



- for cutting soft, medium and hard wire
- precision cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
- for crimping end sleeves (ferrules)
- Vanadium electric steel; forged, oil-hardened



Cutting



Crimping 0.5 to 2.5 mm<sup>2</sup>

| Article No. | EAN<br>400 | N<br>03773- | <b>⊶→</b><br>mm | Pliers             | Head     | Handles                       | Stripping capacities<br>mm <sup>2</sup> | Cutting c | apacities<br>Ø mm | ۲٦<br>g |
|-------------|------------|-------------|-----------------|--------------------|----------|-------------------------------|---|-----------|-------------------|---------|
| 13 01 160   | 034        | 4971        | 160             | black atramentized | polished | plastic coated                | 0.5 - 0.75 / 1.5 / 2.5                  | 2.5       | 1.6               | 112     |
| 13 02 160   | 010        | 0470        | 160             | black atramentized | polished | with multi-component<br>grips | 0.5 - 0.75 / 1.5 / 2.5                  | 2.5       | 1.6               | 139     |
| 13 05 160   | 071        | 1426        | 160             | chrome plated      |          | with multi-component<br>grips | 0.5 - 0.75 / 1.5 / 2.5                  | 2.5       | 1.6               | 139     |

Stripping

# <sup>13</sup> <sup>22</sup> Universal Pliers for STP data cables



- for cutting the entire cable, the single conductor, the shield and the plastic core
- steel needle at the joint for longitudinal scratching of the shield foil
- prismatic blades below the joint for dismantling the cables
- Chrome vanadium electric steel in special quality, oil-hardened



| , | Article No.  | EAN<br>4003773- | <b>←→</b><br>mm | Pliers    | Handles                    | ۵<br>g |
|---|--------------|-----------------|-----------------|-----------|----------------------------|--------|
| • | 13 72 160 SB | 052319          | 160             | burnished | with multi-component grips | 102    |

### 14

## **Diagonal Insulation Strippers**



- the essential pliers for electrical installation work
- precision stripping holes for single (solid) conductors of 1.5 and 2.5 mm<sup>2</sup>
- induction hardened precision blades for soft wire up to 4.0 mm dia., cutting edge hardness approx. 60 HRC
- Vanadium electric steel; forged, oil-hardened



Multi-functional: cutting and stripping

| 14 26 160        | -   |  |
|------------------|-----|--|
| <u></u> £ 1000 V | ∕₽₽ |  |

| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |  | Pliers                | Head     | Handles  | Stripping capacities<br>mm <sup>2</sup> | AWG     | Cutting c | capacities<br>D<br>Ø mm | ے کے<br>g |
|-------------|-----------------|------------------|--|-----------------------|----------|--|---|---------|-----------|-------------------------|-----------|
| 14 22 160   | 034988          | 160              | •  | black<br>atramentized | polished | with multi-compo-<br>nent grips                        | 1.5 + 2.5                               | 15 + 13 | 2.5       | 1.5                     | 206       |
| 14 25 160   | 028697          | 160              |  | chrome plated         |          | with multi-compo-<br>nent grips                        | 1.5 + 2.5                               | 15 + 13 | 2.5       | 1.5                     | 206       |
| 14 26 160   | 040279          | 160              | <b>≙ 1000 V</b><br>@ <b>€ /                                   </b> | chrome plated         |          | insulated with<br>multi-component<br>grips, VDE-tested | 1.5 + 2.5                               | 15 + 13 | 2.5       | 1.5                     | 216       |

# Stripping Tweezers for Coated-Wire



# Insulation Strippers



- 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<br>4003773- |   |
|-------------|-----------------|---|
| 15 19 005   | 021551          | 1 pair of spare blades for 15 11 120 Ø 0.5 mm |
| 15 19 006   | 021568          | 1 pair of spare blades for 15 11 120 Ø 0.6 mm |
| 15 19 008   | 021575          | 1 pair of spare blades for 15 11 120 Ø 0.8 mm |
| 15 19 010   | 021582          | 1 pair of spare blades for 15 11 120 Ø 1.0 mm |

- 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<br>4003773- | <b>∢→</b><br>mm | -  | Head     | Handles        | Stripping capacities<br>Ø mm | ۵'ک<br>g |
|-------------|-----------------|-----------------|----|----------|----------------|------------------------------|----------|
| 15 51 160   | 044451          | 160             |    | polished |                | 0.5                          | 101      |
| 15 61 160   | 014843          | 160             | MM |          | plastic coated | 0.6                          | 102      |
| 15 81 160   | 015574          | 160             |    |          |                | 0.8                          | 102      |

# Dismantling Tools



| Article No.  | EAN<br>4003773- | <b>←→</b><br>mm  |      | Stripping capacities<br>Ø mm | ۲۵<br>g |
|--------------|-----------------|------------------|------|------------------------------|---------|
| 16 20 16 SB  | 060451          | 130              | MM   | 4.0 - 16.0                   | 95      |
| 16 20 28 SB  | 060468          | 130              | //// | 8.0 - 28.0                   | 95      |
| 16 20 165 SB | 043133          | 165              | MM   | 8.0 - 28.0                   | 85      |
|              |                 |                  |      |                              |         |
| 16 29 165    | 043140          | Spare I<br>16 20 | 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 handlesecure grip due to soft compo-
- nent material on handle and holding lever to avoid slipping

**16 20 165 SB** with knife and hook blade, protective cap included



 Housing: plastic, impact-proof





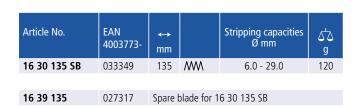
# Dismantling Tool



16 30 135 SB

- 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 adjustmentchanging from circular to longitudinal cutting by
- turning the tool bodyspiral cutting for removing
- intermediate pieces
- replaceable blade
- Housing: plastic, impact-proof









## 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



Adjustable cutting depth

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Stripping capacities<br>Ø mm | ۵'ک<br>g |
|-------------|-----------------|-----------------|------------------------------|----------|
| 16 40 150   | 026709          | 150             | > 25                         | 210      |
|             |                 |                 |                              |          |

**16 49 150** 026716 Spare blade for 16 40 150



Setting the tool for longitudinal cut



Turning the tool for circumferential cut



Longitudinal cut



Circular cut

5tripping Tool for coax cables



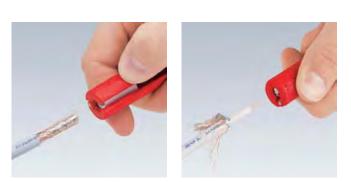
# Stripping Tool for coax cables



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 mm<sup>2</sup>
with length scale 5.0 - 20.0 mm

for stripping coax cables (RG 58, RG 59 and RG 62)

- double shell, folding back stripping tool
- with opening spring and locking device
- Body: plastic, fibreglass-reinforced



| Artic | cle No.   | EAN<br>4003773- | <b>←→</b><br>mm |    | Stripping capacities<br>Ø mm                                | ۵ <sup>۲</sup> ۵<br>g |
|-------|-----------|-----------------|-----------------|----|---|-----------------------|
| 16 6  | 50 100 SB | 040811          | 100             | MM | Coax-cables 4.8 - 7.5 round cables 3 x 0.75 mm <sup>2</sup> | 39                    |

16 60 100 SB

# Dismantling Tool for data cables



16 65 125 SB MM

- 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 / 4.0 mm<sup>2</sup>
- double shell, folding back stripping tool
- with opening spring and locking device
- practical clip for easy transport
- Body: plastic, fibreglass-reinforced



| Article No.  | EAN<br>4003773- | <b>←→</b><br>mm |    | Types of cables                             | Stripping capacities<br>Ø mm | Stripping capacities<br>mm <sup>2</sup> | ۲۵<br>g |
|--------------|-----------------|-----------------|----|---|------------------------------|---|---------|
| 16 65 125 SB | 043157          | 125             | MM | CAT 5, CAT 6, CAT 7, Twisted-Pair (UTP/STP) | 4.5 - 10.0                   | 0.2 - 4.0                               | 50      |

### <sup>16</sup> Universal Dismantling Tools



- 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 mm<sup>2</sup> up to 5 x 2.5 mm<sup>2</sup>)
- 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

#### 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 / 4.0  $\rm mm^2$ 



| Article No.  | EAN<br>4003773- | <b>∢→</b><br>mm |    | Stripping capacities<br>Ø mm | Types of cables  | ۲۵<br>g |
|--------------|-----------------|-----------------|----|------------------------------|--|---------|
| 16 80 125 SB | 040828          | 125             | MM | 8.0 - 13.0                   | round cable, e.g.: 3 x 1.5 mm <sup>2</sup> up to 5 x 2.5 mm <sup>2</sup> | 71      |
| 16 85 125 SB | 060444          | 125             | MM | 8.0 - 13.0                   | round cable, e.g.: 3 x 1.5 mm <sup>2</sup> up to 5 x 2.5 mm <sup>2</sup> | 67      |

## <sup>19</sup> Round Nose Pliers with cutting edge

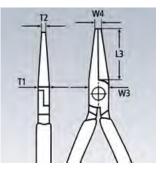
(Jewellers' Pliers)

DIN ISO 5743

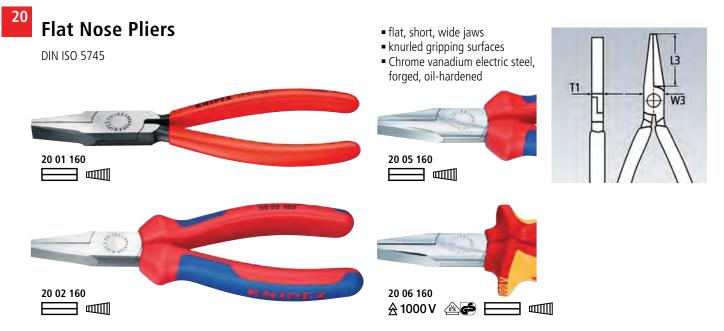


- for gripping and manipulating fine wires, e.g. in jewellery work
- ideal for cutting and bending activities, also in electronics
- for bending wire loops
- precision-ground round jaws with fine, pointed tips
- cutting edges additionally induction hardened, cutting edge hardness approx. ca. 60 HRC
- Vanadium electric steel; forged, oil-hardened

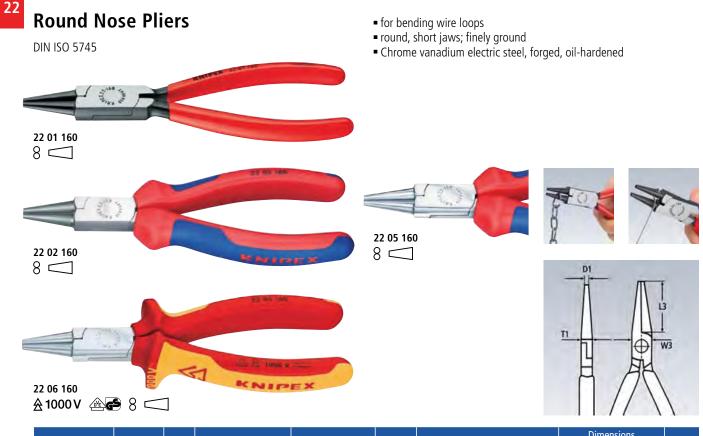




| Article No. | EAN<br>4003773- | <b>∢-→</b><br>mm |   | Pliers                | Head     | Handles        | D1<br>mm | Diı<br>L3<br>mm | nensio<br>T1<br>mm | ons<br>W3<br>mm | W4<br>mm | Cutting c | apacities<br>O<br>Ø mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|------------------|---|-----------------------|----------|----------------|----------|-----------------|--------------------|-----------------|----------|-----------|------------------------|-----------------------|
| 19 01 130   | 034995          | 130              | 8 | black<br>atramentized | polished | plastic coated | 1.0      | 32.0            | 8.0                | 13.5            | 2.0      | 2.2       | 1.6                    | 73                    |
| 19 03 130   | 014348          | 130              | 8 | chrome plated         |          | plastic coated | 1.0      | 32.0            | 8.0                | 13.5            | 2.0      | 2.2       | 1.6                    | 72                    |



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                 | Pliers             | Head     | Handles  | Di<br>L3<br>mm | mensic<br>W3<br>mm | ons<br>T1<br>mm | ۵'۵<br>g |
|-------------|-----------------|-----------------|-----------------|--------------------|----------|--|----------------|--------------------|-----------------|----------|
| 20 01 125   | 014447          | 125             |                 |                    |          |  | 27.0           | 14.5               | 8.0             | 75       |
| 20 01 140   | 014454          | 140             |                 |                    |          |  | 28.0           | 15.5               | 9.5             | 107      |
| 20 01 160   | 015017          | 160             |                 | black atramentized | polished | plastic coated                                   | 30.0           | 17.0               | 9.5             | 144      |
| 20 01 180   | 015666          | 180             |                 |                    |          |  | 35.0           | 19.0               | 10.0            | 188      |
| 20 01 200   | 015673          | 200             |                 |                    |          |  | 38.0           | 21.0               | 12.0            | 268      |
| 20 02 140   | 043386          | 140             |                 |                    | polichad | with multi component gring                       | 28.0           | 15.5               | 9.5             | 137      |
| 20 02 160   | 035008          | 160             |                 | black atramentized | polished | with multi-component grips                       | 30.0           | 17.0               | 9.5             | 172      |
| 20 05 140   | 042464          | 140             |                 | shroma platad      |          | with multi component aving                       | 28.0           | 15.5               | 9.5             | 136      |
| 20 05 160   | 042457          | 160             |                 | chrome plated      |          | with multi-component grips                       | 30.0           | 17.0               | 9.5             | 176      |
| 20 06 160   | 033783          | 160             | 1000 V @ 🖨 🥅 আ∭ | chrome plated      |          | insulated with multi-component grips, VDE-tested | 30.0           | 17.0               | 9.5             | 176      |



|             |          |            |                      |                    |           |  |      | Dimer | nsions |      |     |
|-------------|----------|------------|----------------------|--------------------|-----------|--|------|-------|--------|------|-----|
| Article No. | EAN      | <b>←</b> ► |                      | Pliers             | Head      | Handles  | L3   | W3    | D1     | T1   | 52  |
|             | 4003773- | mm         |                      |                    |           |  | mm   | mm    | mm     | mm   | g   |
| 22 01 125   | 014461   | 125        |                      |                    |           |  | 27.0 | 14.5  | 2.0    | 8.0  | 75  |
| 22 01 140   | 013013   | 140        | 8                    | black atramentized | polished  | plastic coated                                   | 28.0 | 16.5  | 2.5    | 9.5  | 100 |
| 22 01 160   | 015024   | 160        | °—                   | DIACK ALIAMENLIZEU | polistieu | plastic coateu                                   | 30.0 | 18.0  | 3.0    | 9.5  | 140 |
| 22 01 180   | 015819   | 180        |                      |                    |           |  | 35.0 | 21.0  | 3.5    | 10.5 | 177 |
| 22 02 140   | 043430   | 140        | 8                    | black atramentized | polished  | with multi component arise                       | 28.0 | 16.5  | 2.5    | 9.5  | 129 |
| 22 02 160   | 023173   | 160        | 8<br>                | DIACK atramentized | polisned  | with multi-component grips                       | 30.0 | 18.0  | 3.0    | 9.5  | 170 |
| 22 05 140   | 042891   | 140        | 8                    | chromo plated      |           | with multi component aving                       | 28.0 | 16.5  | 2.5    | 9.5  | 127 |
| 22 05 160   | 042907   | 160        | °                    | chrome plated      |           | with multi-component grips                       | 30.0 | 18.0  | 3.0    | 9.5  | 169 |
| 22 06 160   | 033790   | 160        | <b>≵1000 V ﷺ</b> 8 < | chrome plated      |           | insulated with multi-component grips, VDE-tested | 30.0 | 18.0  | 3.0    | 9.5  | 175 |
| 22 07 160   | 015901   | 160        | <b>≜1000 V @€</b> 8⊂ | chrome plated      |           | with plastic dipped insulation,<br>VDE-tested    | 30.0 | 18.0  | 3.0    | 9.5  | 196 |

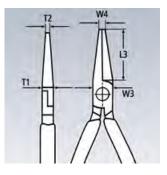
## Flat Nose Pliers with cutting edges

(precision mechanics pliers)

DIN ISO 5745



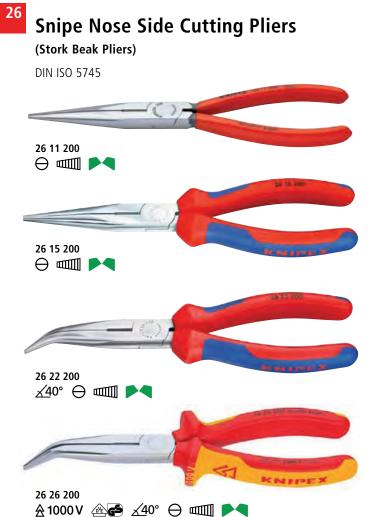
- suitable for gripping and cutting work in fine mechanics
- flat, long jaws, tapering
   cutting addres additional
- cutting edges additionally induction hardened, cutting edge hardness approx. 60 HRC
   High-grade special tool steel,
- High-grade special tool steel forged, oil-hardened



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Head     | Handles        | Cutting ca<br>Ø mm | apacities<br>D<br>Ø mm | T1<br>mm | Di<br>L3<br>mm | mensio<br>W3<br>mm | ns<br>W4<br>mm | T2<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|----------|----------------|--------------------|------------------------|----------|----------------|--------------------|----------------|----------|---------|
| 23 01 140   | 041290          | 140             | polished | plastic coated | 2.5                | 1.6                    | 7.0      | 35.0           | 12.5               | 3.0            | 4.5      | 75      |



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                                    | Pliers                | Head     | Handles   | Cutting of<br>Ø mm | apacities | L3<br>mm | L4<br>mm | Dimer<br>W3<br>mm | nsions<br>T1<br>mm | W4<br>mm | T2<br>mm | 5       |
|-------------|-----------------|-----------------|------------------------------------|-----------------------|----------|---|--------------------|-----------|----------|----------|-------------------|--------------------|----------|----------|---------|
| 25 01 125   | 015932          | 125             |                                    |                       |          |   | 2.2                | 1.6       | 27.0     |          | 13.0              | 7.0                | 2.5      | 1.8      | g<br>73 |
| 25 01 125   | 013082          | 140             | $\Theta \blacksquare \blacksquare$ | black                 | polished | plastic coated  | 2.2                | 1.6       | 42.0     |          | 15.0              | 8.0                | 2.5      | 2.0      | 89      |
| 25 01 160   | 013099          | 160             | 0 - 4                              | atramentized          | F        |   | 2.5                | 1.6       | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 113     |
| 25 02 140   | 023159          | 140             |                                    | black                 |          | with multi-   | 2.5                | 1.6       | 42.0     |          | 15.0              | 8.0                | 2.5      | 2.0      | 109     |
| 25 02 160   | 023166          | 160             | $\ominus$ I $\land$                | atramentized          | polished | component<br>grips  | 2.5                | 1.6       | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 144     |
| 25 03 125   | 043065          | 125             | $\Theta$                           | chromo plotod         |          | plastic contad  | 2.2                | 1.6       | 27.0     |          | 13.0              | 7.0                | 2.5      | 1.8      | 72      |
| 25 03 160   | 014492          | 160             |                                    | chrome plated         |          | plastic coated  | 2.5                | 1.6       | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 116     |
| 25 05 140   | 035015          | 140             |                                    |                       |          | with multi-   | 2.5                | 1.6       | 42.0     |          | 15.0              | 8.0                | 2.5      | 2.0      | 111     |
| 25 05 160   | 022817          | 160             | $\Theta$                           | chrome plated         |          | component<br>grips  | 2.5                | 1.6       | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 144     |
| 25 06 160   | 033806          | 160             | ≙ 1000 V ക്≊<br>⊖ আ∭ ► ٩           | chrome plated         |          | insulated with<br>multi-com-<br>ponent grips,<br>VDE-tested | 2.5                | 1.6       | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 146     |
| 25 21 160   | 015994          | 160             | ∡40° ⊖ আ∭<br>▶◀                    | black<br>atramentized | 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∭<br>▶◀                    | chrome plated         |          | with multi-<br>component<br>grips                           | 2.5                | 1.6       | 50.0     | 23.0     | 16.5              | 9.0                | 3.0      | 2.5      | 143     |
| 25 26 160   | 052111          | 160             | ≜ 1000 V @€<br>∡40° ⊖ আ∭           | chrome plated         |          | insulated with<br>multi-com-<br>ponent grips,<br>VDE-tested | 2.5                | 1.6       | 50.0     | 23.0     | 16.5              | 9.0                | 3.0      | 2.5      | 144     |

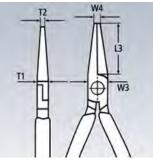


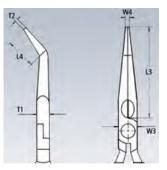
#### Elastic tips: dimensionally stable even when twisted

- 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 electric steel; forged, oil-hardened









| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                              | Pliers                | Head     | Handles  | Cutting c<br>D<br>Ø mm | apacities<br>Ø mm | L3<br>mm | L4<br>mm | Dimer<br>T1<br>mm | nsions<br>  W3<br>  mm | W4<br>mm | T2<br>mm | ۵'ک<br>g |
|-------------|-----------------|-----------------|------------------------------|-----------------------|----------|--|------------------------|-------------------|----------|----------|-------------------|------------------------|----------|----------|----------|
| 26 11 200   | 022824          | 200             | $\Theta$                     | black<br>atramentized | polished | plastic coated   | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 170      |
| 26 12 200   | 023142          | 200             | $\Theta$                     | black<br>atramentized | polished | with multi-com-<br>ponent grips                        | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 201      |
| 26 13 200   | 040590          | 200             | $\Theta$                     | chrome plated         |          | plastic coated   | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 169      |
| 26 15 200   | 035022          | 200             | $\Theta$                     | chrome plated         |          | with multi-com-<br>ponent grips                        | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 198      |
| 26 16 200   | 022831          | 200             | 1000 V @₽ ⊖<br>আ∭ ▶ ◀        | chrome plated         |          | insulated with<br>multi-component<br>grips, VDE-tested | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 206      |
| 26 17 200   | 016069          | 200             | â 1000 V இ∉ ⊖                | chrome plated         |          | with plastic<br>dipped insulation,<br>VDE-tested       | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5                   | 3.0      | 2.5      | 212      |
| 26 21 200   | 022848          | 200             |                              | black<br>atramentized | polished | plastic coated   | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 171      |
| 26 22 200   | 023135          | 200             | ∡40° ⊖  ▶٩                   | black<br>atramentized | polished | with multi-com-<br>ponent grips                        | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 197      |
| 26 23 200   | 016076          | 200             | ∡40° ⊖ <b>≣ ▶</b> ◀          | chrome plated         |          | plastic coated   | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 171      |
| 26 25 200   | 035039          | 200             |                              | chrome plated         |          | with multi-com-<br>ponent grips                        | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 199      |
| 26 26 200   | 022855          | 200             | ≵ 1000 V இ€<br>∡40° ⊖ আ∭ ▶ ◀ | chrome plated         |          | insulated with<br>multi-component<br>grips, VDE-tested | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 204      |
| 26 27 200   | 016090          | 200             | ≵ 1000 V இ€<br>∡40° ⊖ আ∭ ►٩  | chrome plated         |          | with plastic<br>dipped insulation,<br>VDE-tested       | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5                   | 3.0      | 2.5      | 220      |

### **Snipe Nose Pliers with centre cutter**

#### (Telephone Pliers)

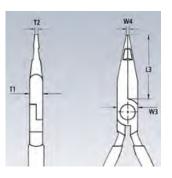
DIN ISO 5743

27



- 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







|             |          |            |       |          |                |      | D    | imensior | IS  |     |     |
|-------------|----------|------------|-------|----------|----------------|------|------|----------|-----|-----|-----|
| Article No. | EAN      | <b>∢</b> → |       | Head     | Handles        | L3   | W3   | T1       | W4  | T2  | 5   |
|             | 4003773- | mm         |       |          |                | mm   | mm   | mm       | mm  | mm  | g   |
| 27 01 160   | 016106   | 160        | ⊖■∎▶◀ | polished | plastic coated | 47.0 | 16.5 | 9.5      | 3.0 | 2.0 | 120 |

#### 28

## **Assembly Pliers**

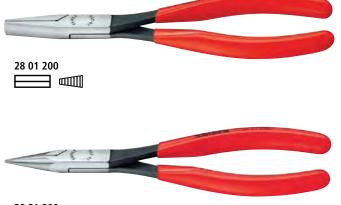
DIN ISO 5743

- specially suitable for gripping and assembly work with a higher prehensile power

T1

knurled gripping surfaces
High-grade special tool steel, forged, oil-hardened

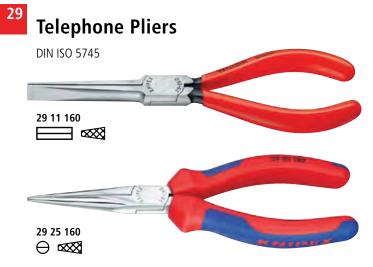
Œ W3





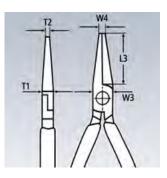
 $\ominus$ 

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |          | Pliers             | Head     | Handles        | L3<br>mm | D<br>W3<br>mm | imensior<br>T1<br>mm | ns<br>W4<br>mm | T2<br>mm | ۵'ک<br>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             | $\Theta$ | black atramentized | polished | plastic coated | 34.0     | 13.5          | 10.5                 | 3.0            | 3.0      | 187      |



- gripping surfaces cross-hatched, knurled
- Chrome vanadium electric steel, forged, oil-hardened

Style 2 extra slim, fine tips; also suitable for soldering work



| Artic | le No. | EAN<br>4003773- | <b>←→</b><br>mm |             | Style | Pliers             | Head     | Handles                    | L3<br>mm | Dir<br>W3<br>mm | nensic<br>T1<br>mm | ns<br>W4<br>mm | T2<br>mm | ۲<br>g |
|-------|--------|-----------------|-----------------|-------------|-------|--------------------|----------|----------------------------|----------|-----------------|--------------------|----------------|----------|--------|
| 29 1  | 1 160  | 016175          | 160             |             | 1     | black atramentized | polished | plastic coated             | 55.0     | 14.0            | 8.0                | 2.5            | 8.5      | 103    |
| 29 2  | 1 160  | 043454          | 160             | $\ominus$   | 2     | black atramentized | polished | plastic coated             | 54.0     | 14.0            | 9.0                | 2.0            | 2.0      | 112    |
| 29 2  | 5 160  | 043478          | 160             | $\ominus$ ൽ | 2     | chrome plated      |          | with multi-component grips | 54.0     | 14.0            | 9.0                | 2.0            | 2.0      | 139    |

#### 31

DIN ISO 5743

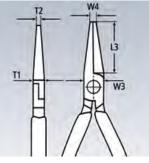
31 11 160  $\Box \Box$ 

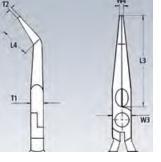
### Gripping Pliers (Needle-Nose Pliers)

- 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



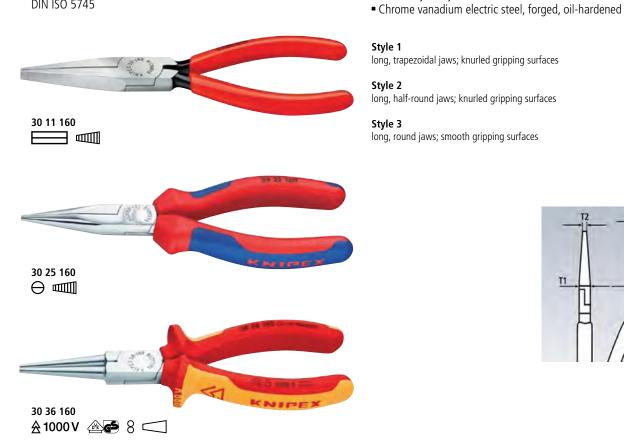


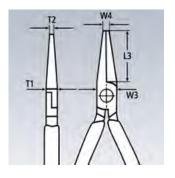


| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                 | Pliers             | Head     | Handles                    | L3<br>mm | L4<br>mm | Dimer<br>W3<br>mm | nsions<br>T1<br>mm | W4<br>mm | T2<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------|--------------------|----------|----------------------------|----------|----------|-------------------|--------------------|----------|----------|---------|
| 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>∡45°</u> ⊟⊂] | black atramentized | polished | plastic coated             | 55.0     | 27.0     | 16.0              | 7.5                | 2.0      | 2.5      | 97      |
| 31 25 160   | 016489          | 160             | <u>∡4</u> 5° ⊟⊂ | chrome plated      |          | with multi-component grips | 55.0     | 27.0     | 16.0              | 7.5                | 2.0      | 2.5      | 123     |

#### 30 Long Nose Pliers

DIN ISO 5745

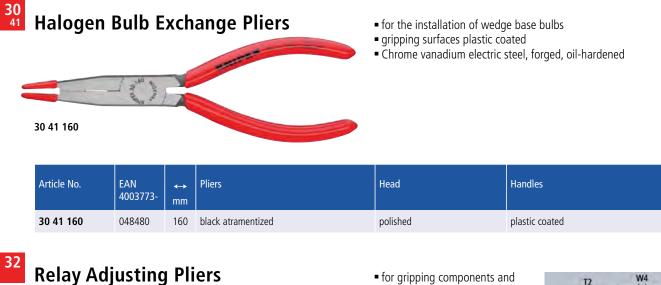




heavy-duty and hard-wearing gripping pliers

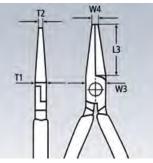
different jaw styles

| Article No. | EAN      |     |                                     | Style | Pliers              | Head      | Handles   | L3   | Di<br>I W3 | mensio<br>T1 | ns<br>W4 | T2  | ۵'۵ |
|-------------|----------|-----|-------------------------------------|-------|---------------------|-----------|---|------|------------|--------------|----------|-----|-----|
|             | 4003773- | mm  |                                     |       |                     |           |   | mm   | mm         | mm           | mm       | mm  | 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 |                                     | 1     | chrome plated       |           | plastic coated  | 42.0 | 15.0       | 8.0          | 2.5      | 4.0 | 87  |
| 30 13 160   | 043485   | 160 |                                     |       | chrome plated       |           | plastic coated  | 46.5 | 16.5       | 9.5          | 3.0      | 5.0 | 118 |
| 30 15 140   | 042914   | 140 |                                     |       |                     |           | with multi component                                    | 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 |                                     |       |                     |           | grips   | 50.0 | 18.5       | 8.0          | 3.0      | 7.0 | 171 |
| 30 16 160   | 001904   | 160 | <u>≜</u> 1000 V ≧ <b>€</b><br>■ ■ ■ | 1     | chrome plated       |           | insulated with multi-<br>component grips,<br>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 | $\ominus$                           | 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 | $\Theta$                            | 2     | chrome plated       |           | plastic coated  | 42.0 | 15.0       | 8.0          | 2.5      | 2.0 | 95  |
| 30 25 140   | 001980   | 140 |                                     |       |                     |           | tal lat   | 42.0 | 15.0       | 8.0          | 2.5      | 2.0 | 114 |
| 30 25 160   | 035060   | 160 | $\ominus$                           | 2     | chrome plated       |           | with multi-component grips                              | 50.0 | 16.5       | 9.5          | 3.0      | 2.5 | 151 |
| 30 25 190   | 043515   | 190 |                                     |       |                     |           | grips   | 50.0 | 18.5       | 8.0          | 3.0      | 2.4 | 168 |
| 30 31 140   | 042426   | 140 | 8                                   | 3     | black atramentized  | polished  | plastic coated  | 37.5 | 15.0       | 8.0          | 4.0      | 2.0 | 82  |
| 30 31 160   | 035077   | 160 | 0                                   | 5     | DIACK attainentizeu | polisileu | plastic coateu  | 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 | 0                                   | 2     |                     |           | with multi-component                                    | 37.5 | 15.0       | 8.0          | 4.0      | 2.0 | 102 |
| 30 35 160   | 035084   | 160 | 8                                   | 3     | chrome plated       |           | grips   | 41.0 | 16.5       | 9.5          | 5.0      | 2.5 | 138 |
| 30 36 160   | 002123   | 160 | <b>≙1000 V ≙€</b><br>8 ◯            | 3     | chrome plated       |           | insulated with multi-<br>component grips,<br>VDE-tested | 41.0 | 16.5       | 9.5          | 5.0      | 2.5 | 141 |





- for gripping components and wires of the smallest diameters and for bending contact and relay springs
- polished gripping surfaces
- edges carefully deburred
- Chrome vanadium electric steel, forged, oil-hardened



5

120



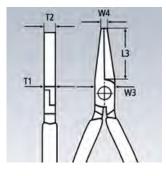
| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                    | Pliers             | Head     | Handles        | L3<br>mm | Di<br>W3<br>mm | mensio<br>T1<br>mm | ns<br>W4<br>mm | T2<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------------|--------------------|----------|----------------|----------|----------------|--------------------|----------------|----------|---------|
| 32 11 135   | 035091          | 135             |                    | black atramentized | polished | plastic coated | 34.0     | 12.5           | 7.0                | 1.4            | 1.5      | 73      |
| 32 21 135   | 043553          | 135             | $\square \bigcirc$ | black atramentized | polished | plastic coated | 34.0     | 12.5           | 7.0                | 1.4            | 3.5      | 74      |
| 32 23 135   | 042921          | 135             | $\square \bigcirc$ | chrome plated      |          | plastic coated | 34.0     | 12.5           | 7.0                | 1.4            | 3.5      | 73      |
| 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 mm wide at the tip and tapering to 1.5 mm thickness
- smooth gripping surfaces - Chrome vanadium electric steel,
- forged, oil-hardened



| 33 01 | 160 |   |
|-------|-----|---|
|       |     | I |

|             |                 |     |                    |                    |          |                |          |          | imensior |          |          |     |
|-------------|-----------------|-----|--------------------|--------------------|----------|----------------|----------|----------|----------|----------|----------|-----|
| Article No. | EAN<br>4003773- | ->  |                    | Pliers             | Head     | Handles        | L3<br>mm | W3<br>mm | l1<br>mm | W4<br>mm | 12<br>mm | 52  |
|             | 4003773         | mm  |                    |                    |          |                |          |          |          |          |          | g   |
| 33 01 160   | 016663          | 160 | $\square \bigcirc$ | black atramentized | polished | plastic coated | 55.0     | 15.0     | 7.5      | 3.0      | 9.0      | 103 |
| 33 03 160   | 016670          | 160 |                    | chrome plated      |          | plastic coated | 55.0     | 15.0     | 7.5      | 3.0      | 9.0      | 103 |

## <sup>34</sup> Precision Electronics Gripping Pliers

DIN ISO 9655





#### The subtle difference

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

- 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

> **Pliers Sets**, see page 197



🕸 8 🗂 🖺 MM

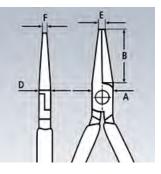
34 32 130



34 32 130

NIPE





| Article No. | FAN             |                  |                                   | Ctulo | Diere     | Head     | Handlag                         | D       |         | mensio  |         |         | 1       |
|-------------|-----------------|------------------|-----------------------------------|-------|-----------|----------|---------------------------------|---------|---------|---------|---------|---------|---------|
| Article No. | EAN<br>4003773- | <b>⊶</b> ►<br>mm |                                   | Style | Pliers    | пеац     | Handles                         | B<br>mm | A<br>mm | D<br>mm | E<br>mm | r<br>mm | ۵۵<br>g |
| 34 12 130   | 061458          | 135              | ☀⊟⊂≘≦₩                            | 1     | burnished | polished | with multi-com-<br>ponent grips | 21.9    | 11.2    | 6.5     | 1.4     | 3.5     | 61      |
| 34 22 130   | 061472          | 135              | ×⊖⊂∎∎™                            | 2     | burnished | polished | with multi-com-<br>ponent grips | 22.7    | 11.2    | 6.5     | 1.6     | 1.6     | 61      |
| 34 32 130   | 061496          | 135              | \$88 <b>5 1 1 1 1 1 1 1 1 1 1</b> | 3     | burnished | polished | with multi-com-<br>ponent grips | 23.7    | 11.2    | 6.5     | 2.0     | 1.0     | 59      |

### Precision Electronics Gripping Pliers ESD

DIN ISO 9655

34







### ▲ \$ 8 < 130 ESD

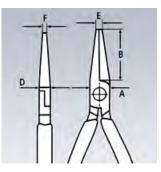


- electrostatic energy is discharged through the handles in a gradual and controlled manner
- which protects components endangered by electrostatic discharge
- in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472
- for very precise assembly work, e.g. in electronics and fine mechanics
- for gripping, holding and bending
- electrically discharging handles dissipative
- smoothly ground gripping surfaces, edges finely rounded
- approx. 20 % lighter than conventional electronics pliers
- bolted joint and carefully manufactured joint surfaces for even, lowfriction 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



**Pliers Sets**, see page 197

| Article No.   | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Style | Pliers    | Head     | Handles                       | B<br>mm | Di<br>A<br>mm | mensio<br>D<br>mm | ns<br>E<br>mm | F<br>mm | ۲٦<br>g |
|---------------|-----------------|-----------------|---------------------|-------|-----------|----------|-------------------------------|---------|---------------|-------------------|---------------|---------|---------|
| 34 12 130 ESD | 061632          | 135             | ▲ ≉ 📰<br>⊂] ₽`\$ MM | 1     | burnished | polished | with multi-component<br>grips | 21.9    | 11.2          | 6.5               | 1.4           | 3.5     | 62      |
| 34 22 130 ESD | 061656          | 135             | ▲≉⊖⊂⊐<br>£≤ MM      | 2     | burnished | polished | with multi-component<br>grips | 22.7    | 11.2          | 6.5               | 1.6           | 1.6     | 65      |
| 34 32 130 ESD | 061670          | 135             | ▲*8⊂155<br>MM       | 3     | burnished | polished | with multi-component<br>grips | 23.7    | 11.2          | 6.5               | 2.0           | 1.0     | 62      |



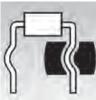


| A 41 A 41     | <b>F</b> 4 11   |            |   |                 |                            |         |         | nensio  | ns      |         |    |
|---------------|-----------------|------------|---|-----------------|----------------------------|---------|---------|---------|---------|---------|----|
| Article No.   | EAN<br>4003773- | <b>∢</b> → |   | Head            | Handles                    | B<br>mm | A<br>mm | D<br>mm | E<br>mm | F<br>mm | 52 |
|               | 4003773-        | mm         |   |                 |                            |         |         |         |         |         | g  |
| 35 12 115 ESD | 024835          | 115        | ▲*■ </th <th>mirror polished</th> <th>with multi-component grips</th> <th>22.5</th> <th>9.5</th> <th>6.5</th> <th>2.0</th> <th>4.0</th> <th>74</th> | mirror polished | with multi-component grips | 22.5    | 9.5     | 6.5     | 2.0     | 4.0     | 74 |
| 35 22 115 ESD | 024842          | 115        | ▲≉⊖⊂⊡⊡ MM   | 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        | ເພື≱∡₄₅°⊖⊂⊂ ⊑⊂™   | mirror polished | with multi-component grips | 22.5    | 9.5     | 6.5     | 2.0     | 1.5     | 74 |

## <sup>36</sup> Electronics Mounting Pliers

DIN ISO 5743





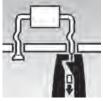
**36 12 130** to bend wire in shape for the distance to the board



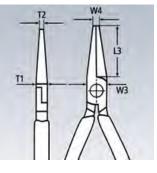


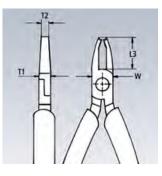
**36 22 125** to bend and cut wire at 1.6 mm length below the board





**36 32 125** to crunch and cut wire at 1.6 mm length below the board





| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |         | Head            | Handles                    | Cutting capacities | L3<br>mm | Di<br>W<br>mm | mensio<br>T1<br>mm | ns<br>W1<br>mm | T2<br>mm | ۲٦<br>g |
|-------------|-----------------|-----------------|---------|-----------------|----------------------------|--------------------|----------|---------------|--------------------|----------------|----------|---------|
| 36 12 130   | 016861          | 130             | *51M    | mirror polished | with multi-component grips |                    | 23.0     | 12.0          | 9.5                | 5.5            | 6.0      | 94      |
| 36 22 125   | 046967          | 125             | ₩[]] MM | 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     |

- 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

#### 37 Gripping Pliers for precision mechanics

DIN ISO 9655







- 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
- Iap joint
- Chrome vanadium electric steel, forged, oil-hardened

**Style 1** flat, wide jaws

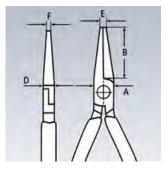
Style 2 flat, concave and pointed jaws

Style 3 half-round jaws

#### Style 4

round, pointed jaws to bend wire loops





|             |                 |                 |    |       |                    |          |                |         | D       | imensior |         |         |         |
|-------------|-----------------|-----------------|----|-------|--------------------|----------|----------------|---------|---------|----------|---------|---------|---------|
| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |    | Style | Pliers             | Head     | Handles        | B<br>mm | A<br>mm | D<br>mm  | E<br>mm | F<br>mm | ۵۵<br>g |
| 37 11 125   | 014287          | 125             |    | 1     | black atramentized | polished | plastic coated | 27.0    | 12.5    | 7.0      | 2.0     | 5.5     | 76      |
| 37 13 125   | 043638          | 125             |    | 1     | chrome plated      |          | plastic coated | 27.0    | 12.5    | 7.0      | 2.0     | 5.5     | 71      |
| 37 21 125   | 035138          | 125             |    | 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             | 0⊂ | 3     | black atramentized | polished | plastic coated | 27.0    | 12.5    | 7.0      | 2.0     | 1.6     | 74      |
| 37 33 125   | 016960          | 125             | 0⊂ | 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      |



38

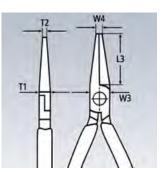


- high bending strength of the pliers jaws/tips
- gripping surfaces cross-hatched, knurled
- Vanadium electric steel; forged, oil-hardened









Dimensions

38 91 200

<u>∡4</u>5° ⊖ ∞⊗

38 41 190

38 45 190

38 71 200

38 91 200

38 95 200

017141

043676

017202

017219

017233

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |  | Style | Pliers             | Head     | Handles       |
|-------------|-----------------|-----------------|--|-------|--------------------|----------|---------------|
| 38 11 200   | 035169          | 200             | $\ominus$ and a set of the | 1     | black atramentized | polished | plastic coate |
| 38 15 200   | 039594          | 200             | $\ominus$ 🛛  | 1     | chrome plated      |          | with multi-c  |
| 38 21 200   | 035176          | 200             | ∡40° ⊖ ൽ   | 2     | black atramentized | polished | plastic coate |
| 38 25 200   | 043669          | 200             | ∡40° ⊖ ൽ   | 2     | chrome plated      |          | with multi-c  |
| 38 31 200   | 040712          | 200             | $\ominus$ x x x x x x x x x x x x x x x x x x x  | 3     | black atramentized | polished | plastic coate |
| 38 35 200   | 017134          | 200             | $\ominus$  | 3     | chrome plated      |          | with multi-c  |

| <b>⊶</b> ⊷<br>mm |  | Style | Pliers             | Head     | Handles                    | L3<br>mm | W3<br>mm | T1<br>mm | W4<br>mm | T2<br>mm | ۵۵<br>g |
|------------------|--|-------|--------------------|----------|----------------------------|----------|----------|----------|----------|----------|---------|
| 200              | $\ominus$ and a set of the | 1     | black atramentized | polished | plastic coated             | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 179     |
| 200              | $\ominus$ 🛛  | 1     | chrome plated      |          | with multi-component grips | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 209     |
| 200              | <u>∡4</u> 0° ⊖ ∞∞  | 2     | black atramentized | polished | plastic coated             | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 175     |
| 200              | <u>∡4</u> 0° ⊖ ∞   | 2     | chrome plated      |          | with multi-component grips | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 209     |
| 200              | $\ominus$ and a set of the | 3     | black atramentized | polished | plastic coated             | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 176     |
| 200              | $\Theta$   | 3     | chrome plated      |          | with multi-component grips | 73.0     | 17.5     | 9.5      | 3.0      | 2.5      | 205     |
| 190              |  | 4     | black atramentized | polished | plastic coated             | 50.0     | 18.0     | 8.0      | 2.0      | 8.0      | 139     |
| 190              |  | 4     | chrome plated      |          | with multi-component grips | 50.0     | 18.0     | 8.0      | 2.0      | 8.0      | 171     |
| 200              | ∡70° ⊖ ∞∞  | 7     | black atramentized | polished | plastic coated             | 73.0     | 17.5     | 9.5      | 3.0      | 2.0      | 174     |
| 200              | <u>∡4</u> 5° ⊖ ∞⊗  | 9     | black atramentized | polished | plastic coated             | 73.0     | 17.5     | 9.5      |          | 2.5      | 177     |
| 200              | <u>√</u> 45° 🕸   | 9     | chrome plated      |          | with multi-component grips | 73.0     | 17.5     | 9.5      |          | 2.5      | 207     |

#### 40 **Universal Grip Pliers**



40 04 250 

41

## **Grip Pliers**



41 04 250 

Style 0 jaws for round workpieces, with wire cutter

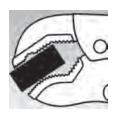
- hold round, profile and flat material securely
- heavy duty model
- with adjustment screw and release lever
- one-hand operation
- high clamping pressure due to toggle lever action
- Pliers body: rolled steel, high-strength
- Gripping jaws: chrome vanadium electric steel, forged

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | O]<br>mm |    |    | ۵۵<br>g |
|-------------|-----------------|-----------------|----------|----|----|---------|
| 40 04 180   | 022190          | 180             | 35       | 25 | 32 | 310     |
| 40 04 250   | 002710          | 250             | 35       | 30 | 32 | 521     |

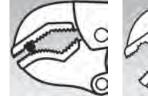
- hold round, profile and flat material securely
- heavy duty model
- with adjustment screw and release lever
- one-hand operation
- high clamping pressure due to toggle lever action
- Pliers body: rolled steel, high-strength
- Gripping jaws: chrome vanadium electric steel, forged

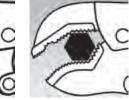
## Style 1

jaws with double prism for round, section and flat material













straight jaws for flat material





Long-Nose Grip Pliers, narrow, long jaws

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Style | Pliers        | O]<br>mm |    |    | ۵'۵<br>g |
|-------------|-----------------|-----------------|-------|---------------|----------|----|----|----------|
| 41 04 180   | 002741          | 180             |       |               | 30       | 20 | 30 | 363      |
| 41 04 250   | 002758          | 250             | 0     | nickel plated | 40       | 20 | 30 | 517      |
| 41 04 300   | 022183          | 300             |       |               | 65       | 30 | 34 | 923      |
| 41 14 250   | 023470          | 250             | 1     | nickel plated | 36       | 36 | 36 | 557      |
| 41 24 225   | 023487          | 225             | 2     | nickel plated | 25       | 16 | 30 | 504      |
| 41 34 165   | 047858          | 165             | 3     | nickel plated | 20       | 10 | 24 | 189      |

## 42 Welding Grip Pliers



42 14 280

- 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 14 280

heat resistant malleable cast iron jaws; section or flat material items lying side by side are held in place during welding; also for section material with vertical webs up to 25 mm height

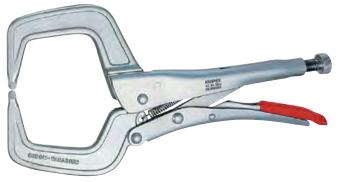




42 24 280



**42 24 280** heat resistant malleable cast iron jaws; round or tubular material items lying centrally side by side are held securely during welding

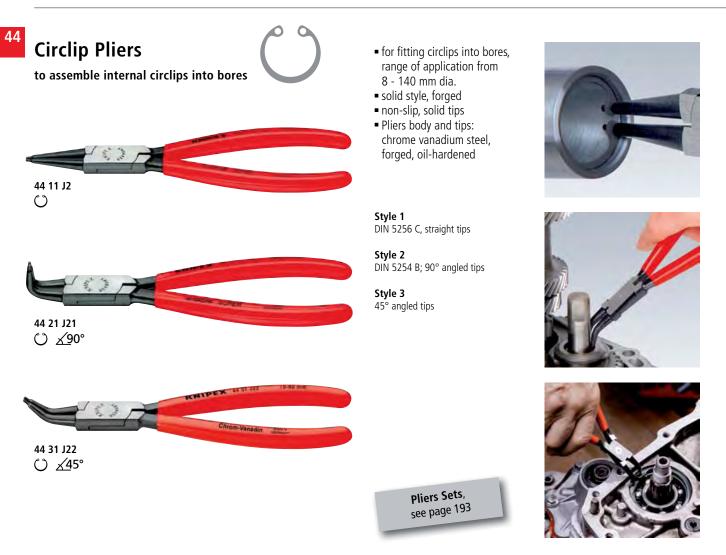


42 34 280

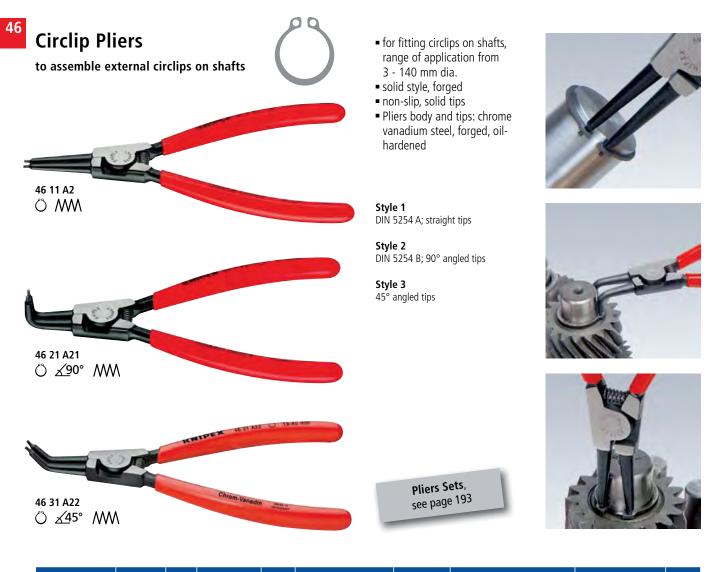


**42 34 280** gripping jaws of chrome vanadium steel, drop forged; clamps cumbersome workpieces and sections with high webs up to 40 mm

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers        | O]<br>mm |    | ۲۵<br>g |
|-------------|-----------------|-----------------|---------------|----------|----|---------|
| 42 14 280   | 022206          | 280             | nickel plated | 30-65    | 50 | 917     |
| 42 24 280   | 022213          | 280             | nickel plated | 10-70    |    | 850     |
| 42 34 280   | 022220          | 280             | nickel plated |          | 90 | 692     |



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                 | Style | Pliers             | Head     | Handles        | Size of bore<br>Ø mm | ے<br>م |
|-------------|-----------------|-----------------|-----------------|-------|--------------------|----------|----------------|----------------------|--------|
| 44 11 J0    | 040286          | 140             |                 |       |                    |          |                | 8 - 13               | 88     |
| 44 11 J1    | 022862          | 140             |                 |       |                    |          |                | 12 - 25              | 88     |
| 44 11 J2    | 022879          | 180             | C               | 1     | black atramentized | polished | plastic coated | 19 - 60              | 135    |
| 44 11 J3    | 033943          | 225             | -               |       |                    |          |                | 40 - 100             | 196    |
| 44 11 J4    | 042549          | 320             |                 |       |                    |          |                | 85 - 140             | 469    |
| 44 13 J0    | 048176          | 140             |                 |       |                    |          |                | 8 - 13               | 89     |
| 44 13 J1    | 042938          | 140             |                 |       |                    |          |                | 12 - 25              | 88     |
| 44 13 J2    | 042945          | 180             | C               | 1     | chrome plated      |          | plastic coated | 19 - 60              | 138    |
| 44 13 J3    | 042952          | 225             |                 |       |                    |          |                | 40 - 100             | 194    |
| 44 13 J4    | 017301          | 320             |                 |       |                    |          |                | 85 - 140             | 463    |
| 44 21 J01   | 040132          | 130             |                 |       |                    |          |                | 8 - 13               | 88     |
| 44 21 J11   | 022886          | 130             |                 |       |                    |          |                | 12 - 25              | 88     |
| 44 21 J21   | 022893          | 170             | O <u>⊀</u> 90°  | 2     | black atramentized | polished | plastic coated | 19 - 60              | 139    |
| 44 21 J31   | 033769          | 215             |                 |       |                    |          |                | 40 - 100             | 196    |
| 44 21 J41   | 043683          | 300             |                 |       |                    |          |                | 85 - 140             | 462    |
| 44 23 J01   | 017325          | 140             |                 |       |                    |          |                | 8 - 13               | 87     |
| 44 23 J11   | 042969          | 130             | 63 (222         | 2     |                    |          |                | 12 - 25              | 89     |
| 44 23 J21   | 042976          | 170             | Ů <u>∡</u> 90°  | 2     | chrome plated      |          | plastic coated | 19 - 60              | 138    |
| 44 23 J31   | 042983          | 215             |                 |       |                    |          |                | 40 - 100             | 200    |
| 44 31 J02   | 066941          | 140             |                 |       |                    |          |                | 8 - 13               | 90     |
| 44 31 J12   | 066958          | 140             |                 |       |                    |          |                | 12 - 25              | 90     |
| 44 31 J22   | 066965          | 180             | () <u>∡4</u> 5° | 3     | black atramentized | polished | plastic coated | 19 - 60              | 140    |
| 44 31 J32   | 066972          | 225             |                 |       |                    |          |                | 40 - 100             | 195    |
| 44 31 J42   | 066989          | 310             |                 |       |                    |          |                | 85 - 140             | 465    |



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                 | Style | Pliers             | Head     | Handles        | Size of shaft<br>Ø mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------|-------|--------------------|----------|----------------|-----------------------|---------|
| 46 11 A0    | 033950          | 140             |                 |       |                    |          |                | 3 - 10                | 85      |
| 46 11 A1    | 022909          | 140             |                 |       |                    |          |                | 10 - 25               | 86      |
| 46 11 A2    | 022916          | 180             | 0 MM            | 1     | black atramentized | polished | plastic coated | 19 - 60               | 134     |
| 46 11 A3    | 033974          | 210             |                 |       |                    |          |                | 40 - 100              | 220     |
| 46 11 A4    | 042532          | 320             |                 |       |                    |          |                | 85 - 140              | 505     |
| 46 13 A0    | 017417          | 140             |                 |       |                    |          |                | 3 - 10                | 85      |
| 46 13 A1    | 042990          | 140             | om              | 1     | shrama platad      |          | plastic coated | 10 - 25               | 82      |
| 46 13 A2    | 043003          | 180             | 0////           | I     | chrome plated      |          | plastic coated | 19 - 60               | 133     |
| 46 13 A3    | 043010          | 210             |                 |       |                    |          |                | 40 - 100              | 211     |
| 46 21 A01   | 033967          | 125             |                 |       |                    |          |                | 3 - 10                | 85      |
| 46 21 A11   | 023005          | 125             |                 |       |                    |          |                | 10 - 25               | 85      |
| 46 21 A21   | 022923          | 170             | ©∡90° MM        | 2     | black atramentized | polished | plastic coated | 19 - 60               | 132     |
| 46 21 A31   | 033981          | 200             |                 |       |                    |          |                | 40 - 100              | 219     |
| 46 21 A41   | 039365          | 300             |                 |       |                    |          |                | 85 - 140              | 510     |
| 46 23 A01   | 017509          | 125             |                 |       |                    |          |                | 3 - 10                | 84      |
| 46 23 A11   | 043027          | 125             | ് <u>∡</u> ഊ MM | 2     | chrome plated      |          | plastic coated | 10 - 25               | 84      |
| 46 23 A21   | 043034          | 170             |                 | Z     | chrome plated      |          | plastic coateu | 19 - 60               | 132     |
| 46 23 A31   | 043041          | 200             |                 |       |                    |          |                | 40 - 100              | 221     |
| 46 31 A02   | 066996          | 130             |                 |       |                    |          |                | 3 - 10                | 83      |
| 46 31 A12   | 067009          | 130             |                 |       |                    |          |                | 10 - 25               | 85      |
| 46 31 A22   | 067016          | 185             | Ö∡45° MM        | 3     | black atramentized | polished | plastic coated | 19 - 60               | 133     |
| 46 31 A32   | 067023          | 210             |                 |       |                    |          |                | 40 - 100              | 213     |
| 46 31 A42   | 067030          | 310             |                 |       |                    |          |                | 85 - 140              | 511     |



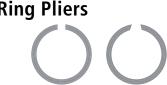
| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |                                  | Style   | Pliers              | Size of bore<br>Ø mm | ۲۵<br>g |  |  |  |
|-------------|-----------------|----------------|----------------------------------|---------|---------------------|----------------------|---------|--|--|--|
| 44 10 J5    | 024910          | 570            | on                               | 1       | black powder-coated | 122 - 300            | 1738    |  |  |  |
| 44 10 J6    | 024927          | 580            |                                  | I       | black powdel-coaled | 252 - 400            | 1755    |  |  |  |
| 44 20 J51   | 024958          | 590            | ⊜∡90° ₽~€                        | 2       |                     | 122 - 300            | 1803    |  |  |  |
| 44 20 J61   | 024965          | 600            |                                  | Z       | black powder-coated | 252 - 400            | 1723    |  |  |  |
|             |                 |                |                                  |         |                     |                      |         |  |  |  |
| 44 19 J5    | 024934          | 1 pair         | of spare tips for 44             | 4 10 J5 |                     |                      |         |  |  |  |
| 44 19 J6    | 024941          | 1 pair         | air of spare tips for 44 10 J6   |         |                     |                      |         |  |  |  |
| 44 29 J51   | 024972          | 1 pair         | vair of spare tips for 44 20 J51 |         |                     |                      |         |  |  |  |
| 44 29 J61   | 024989          | 1 pair         | air of spare tips for 44 20 J61  |         |                     |                      |         |  |  |  |



## **Special Retaining Ring Pliers**

for retaining rings on shafts

DIN ISO 5743





00 🚳 MM



O O <u>∡</u>30° MM

- 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 21 200

45 10 170

for retaining rings with a minimum ring split gap of 3.6 mm

45 21 200

#### 45 21 200

45 10 170

anlged 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

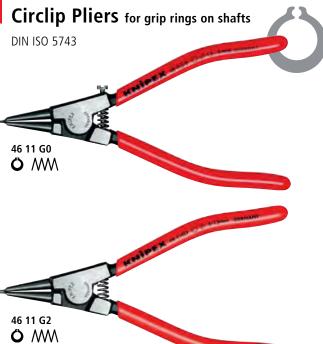
| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |           | Pliers    | Handles        | ۵'۵<br>g |
|-------------|-----------------|-----------------|-----------|-----------|----------------|----------|
| 45 10 170   | 017370          | 170             | 00∞≊MM    | burnished |                | 156      |
| 45 21 200   | 031208          | 200             | OO∡3°° MM | burnished | plastic coated | 186      |

| 6<br>Circlip F<br>for large ext |                 | 05                | C                           | $\mathcal{S}$ | <ul> <li>for assembling circlips on shafts within the</li> <li>with locking device, can be released</li> <li>with replaceable tips made of tempered ste</li> <li>black powder coated</li> <li>Pliers body: rolled steel, high-strength</li> <li>Tips: special tool steel, oil-hardened</li> </ul> Style 1 DIN 5254 A; straight tips Style 2 DIN 5254 B; 90° angled tips | s made of tempered steel<br>d<br>eel, high-strength<br>el, oil-hardened |          |  |  |  |
|---------------------------------|-----------------|-------------------|-----------------------------|---------------|---|---|----------|--|--|--|
| Article No.                     | EAN<br>4003773- | <b>∢-</b> →<br>mm |                             | Style         | Pliers  | Size of shaft<br>Ø mm   | ۵'ک<br>g |  |  |  |
| 46 10 A5                        | 024996          | 560               | /\ <b>5-7</b>               | 1             | black counter control   | 122 - 300   | 1773     |  |  |  |
| 46 10 A6                        | 025009          | 570               | ° <b>f</b> s                | I             | black powder-coated   | 252 - 400   | 1795     |  |  |  |
| 46 20 A51                       | 025023          | 570               | ⊜∡90° ₽€                    | 2             | black pourder control   | 122 - 300   | 1832     |  |  |  |
| 46 20 A61                       | 025030          | 580               |                             | 2             | black powder-coated   | 252 - 400   | 1826     |  |  |  |
|                                 |                 |                   |                             |               |   |   |          |  |  |  |
| 46 19 A5                        | 024316          | 1 pair            | of spare tips for 46 10 A5  |               |   |   |          |  |  |  |
| 46 19 A6                        | 025016          | 1 pair            | of spare tips for 46 10 A6  |               |   |   |          |  |  |  |
| 46 29 A51                       | 025047          | 1 pair            | of spare tips for 46 20 A51 |               |   |   |          |  |  |  |



46 29 A61

025054



1 pair of spare tips for 46 20 A61

- for fitting grip rings on shafts from 1.5 30 mm dia.
- with opening spring
  solid style, forged
  non-slip, solid tips

- Pliers body and tips: chrome vanadium steel, forged, oil-hardened

#### 46 11 G0

for rings of 1.5 - 4.0 mm dia., with adjustable stop screw to prevent overstretching

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                  | Pliers             | Head     | Handles        | Size of shaft<br>Ø mm | ۲<br>g |
|-------------|-----------------|-----------------|------------------|--------------------|----------|----------------|-----------------------|--------|
| 46 11 G0    | 047896          | 140             | <b>Ö</b> MM      | black atramentized | polished | plastic coated | 1.5 - 4.0             | 87     |
| 46 11 G1    | 031062          | 140             |                  |                    | P. I. I. |                | 4.0 - 7.0             | 85     |
| 46 11 G2    | 031079          | 140             | <b>A A A A A</b> |                    |          |                | 5.0 - 13.0            | 85     |
| 46 11 G3    | 031086          | 140             | <b>o</b> ////    | black atramentized | polished | plastic coated | 14.0 - 18.0           | 86     |
| 46 11 G4    | 031093          | 180             |                  |                    |          |                | 20.0 - 30.0           | 134    |

48

### **Precision Circlip Pliers**

to assemble internal circlips into bores





Style 1 DIN 5256 C, straight tips

Style 2 DIN 5256 D; 90° angled tips

> **Pliers Sets**, see page 193



Slim head shape



#### **Tiptop quality**

Easy and reliable assembly: form-fitting inserted and pressed-in tips made of high-density spring steel offer a high level added resilience 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.

#### With inserted tips for reliable work

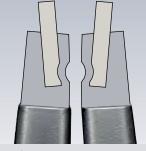
- heavy duty in continuous operation: up to 10 times longer service life compared to turned tips
- joint with screw: precise, zero backlash operation of pliers
- non-slip plastic coating on the handles
- Pliers body: chrome vanadium electric steel, forged, oil-hardened
- Inserted tips: spring steel wire, drawn

#### 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 highdensity spring steel

Tight fit through compression

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |        | Style | Pliers            | Handles                       | Size of bore<br>Ø mm | Tips Ø<br>mm | ۲۵<br>g |
|-------------|-----------------|----------------|--------|-------|-------------------|-------------------------------|----------------------|--------------|---------|
| 48 11 J0    | 048510          | 140            |        |       |                   |                               | 8 - 13               | 0.90         | 105     |
| 48 11 J1    | 048527          | 140            |        |       |                   | with non-slip plastic coating | 12 - 25              | 1.25         | 105     |
| 48 11 J2    | 048534          | 180            | ots    | 1     | grey atramentized |                               | 19 - 60              | 1.80         | 175     |
| 48 11 J3    | 048541          | 225            |        |       |                   |                               | 40 - 100             | 2.25         | 266     |
| 48 11 J4    | 048558          | 320            |        |       |                   |                               | 85 - 140             | 3.20         | 580     |
| 48 21 J01   | 048619          | 130            |        |       |                   |                               | 8 - 13               | 0.90         | 105     |
| 48 21 J11   | 048633          | 130            |        |       |                   |                               | 12 - 25              | 1.25         | 105     |
| 48 21 J21   | 048640          | 165            | ℃∡୭° 📲 | 2     | grey atramentized | with non-slip plastic coating | 19 - 60              | 1.80         | 175     |
| 48 21 J31   | 048657          | 210            |        |       |                   |                               | 40 - 100             | 2.25         | 265     |
| 48 21 J41   | 048664          | 305            |        |       |                   |                               | 85 - 140             | 3.20         | 576     |

## <sup>49</sup> Precision Circlip Pliers

#### to assemble external circlips on shafts



#### With inserted tips for reliable work

- heavy duty in continuous operation: up to 10 times longer service life compared to turned tips
- large contact faces on the tips: no distortion of circlips, easy fitting
- joint with screw: 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

#### 49 31 A0 / Style 3

with additional opening limiter (infinitely adjustable opening width); avoids overstretching of small external circlips; DIN 5254 A; straight tips

#### 49 41 A01 / Style 4

with additional opening limiter (infinitely adjustable opening width); avoids overstretching of small external circlips; DIN 5254 B; 90° angled tips



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



Circlips are held reliably: large contact areas and the position of the tips make it difficult for the circlip to bounce off



Style 3 / style 4: with adjustable opening restriction



Conventional Circlip Pliers: distortion of the circlip when widening the circlip

| Article No. | EAN<br>4003773- | <b>→</b><br>mm |                 | Style | Pliers            | Handles                          | Size of shaft<br>Ø mm | Tips Ø<br>mm | ے<br>م |
|-------------|-----------------|----------------|-----------------|-------|-------------------|----------------------------------|-----------------------|--------------|--------|
| 49 11 A0    | 048718          | 140            |                 |       |                   |                                  | 3 - 10                | 0.90         | 101    |
| 49 11 A1    | 048725          | 140            |                 |       |                   |                                  | 10 - 25               | 1.25         | 100    |
| 49 11 A2    | 048732          | 180            | ÖESIM           | 1     | grey atramentized | with non-slip plastic<br>coating | 19 - 60               | 1.80         | 170    |
| 49 11 A3    | 048749          | 225            |                 |       |                   |                                  | 40 - 100              | 2.25         | 270    |
| 49 11 A4    | 048756          | 320            |                 |       |                   |                                  | 85 - 140              | 3.20         | 599    |
| 49 21 A01   | 048817          | 130            | ° ∡90° €S MM    | 2     | grey atramentized | with non-slip plastic coating    | 3 - 10                | 0.90         | 100    |
| 49 21 A11   | 048824          | 130            |                 |       |                   |                                  | 10 - 25               | 1.25         | 102    |
| 49 21 A21   | 048831          | 165            |                 |       |                   |                                  | 19 - 60               | 1.80         | 169    |
| 49 21 A31   | 048848          | 210            |                 |       |                   |                                  | 40 - 100              | 2.25         | 272    |
| 49 21 A41   | 048855          | 305            |                 |       |                   |                                  | 85 - 140              | 3.20         | 601    |
| 49 31 A0    | 061748          | 140            | ő <b>si </b> am | 3     | grey atramentized | with non-slip plastic coating    | 3 - 10                | 0.90         | 103    |
| 49 41 A01   | 061755          | 130            | Ů∡℠≌≣₩₩         | 4     | grey atramentized | with non-slip plastic coating    | 3 - 10                | 0.90         | 102    |

### 50

## **Carpenters' Pincers**

DIN ISO 9243





50 01 225

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |  | Pliers             | Head     | Handles        | Cutting capacities<br>D<br>Ø mm | ۵'ک<br>g |
|-------------|-----------------|-----------------|--|--------------------|----------|----------------|---------------------------------|----------|
| 50 00 130   | 014423          | 130             |  |                    |          |                | 1,6                             | 135      |
| 50 00 160   | 013129          | 160             |  |                    |          |                | 1,8                             | 215      |
| 50 00 180   | 013136          | 180             |  |                    |          |                | 2,0                             | 303      |
| 50 00 210   | 013143          | 210             |  | black atramentized | polished |                | 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 01 130   | 015789          | 130             |  |                    |          |                | 1,6                             | 141      |
| 50 01 160   | 015802          | 160             |  |                    |          |                | 1,8                             | 223      |
| 50 01 180   | 016021          | 180             |  |                    |          |                | 2,0                             | 316      |
| 50 01 210   | 016052          | 210             |  | black atramentized | polished | plastic coated | 2,2                             | 411      |
| 50 01 225   | 016083          | 225             |  |                    |          |                | 2,2                             | 437      |
| 50 01 250   | 016267          | 250             |  |                    | 2,2      |                | 2,2                             | 583      |
| 50 01 300   | 016915          | 300             |  |                    |          |                | 2,4                             | 903      |

for heaviest duty

well balanced

oil-hardened

specially favoured by craftsmen

for their precise workmanship • extreme wear resistance and

 cutting edges additionally hardened; cutting edge hardness approx. 60 HRC
 Special tool steel, forged,

51

### Hammerhead Style Carpenters' Pincers

DIN ISO 9243

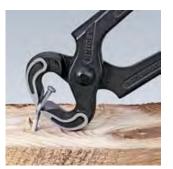


- with striking face for driving in nails
- cutting edges additionally hardened; cutting edge hardness approx. 60 HRC
- Special tool steel, forged, oil-hardened



Multi-functional: driving in and pulling nails

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers             | Head     | Handles        | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|--------------------|----------|----------------|-----------------------|
| 51 01 210   | 023104          | 210             | black atramentized | polished | plastic coated | 413                   |



#### 55 **Farriers' Pincers** • the ideal pliers for the farrier • with small head and anvil for (Tear-off Pliers for vehicle bodywork) redirecting horseshoe-nails DIN ISO 5743 also suitable for dismantling work in vehicle body workshops cutting edges additionally hardened; cutting edge hardness approx. 59 HRC 55 00 300 Special tool steel, forged, PA oil-hardened Article No. EAN Pliers Head Head width 4003773mm mm 55 00 300 014072 300 Pq black atramentized polished 20,0

#### 57

## **Unsoling Pincer for horseshoes**

DIN ISO 5743

#### for the farrier

- also suitable for dismantling work in vehicle body workshops
- also for dismantling work on timber and metal
- cutting edges additionally hardened; cutting edge hardness approx. 59 HRC
- Special tool steel, forged, oil-hardened

| 57 00 360   | 1. Contraction of the second s | 1.1             |                    |          |                  |         |
|-------------|--|-----------------|--------------------|----------|------------------|---------|
| Article No. | EAN<br>4003773-  | <b>←→</b><br>mm | Pliers             | Head     | Head width<br>mm | ۲۵<br>g |
| 57 00 360   | 017622   | 360             | black atramentized | polished | 30,5             | 1164    |



### Potters' Pincers (Brick Pincers)

DIN ISO 5743

58 30 225

for pottery work

- with wire cutter for soft wirecutting edges additionally
- hardened; cutting edge hardness approx. 59 HRC
- Special tool steel, forged, oil-hardened

58 10 225 head width 10 mm

58 30 225 head width 20 mm

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers             | Head     | Head width<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------------|----------|------------------|---------|
| 58 10 225   | 017646          | 225             | black atramentized | polished | 10,0             | 328     |
| 58 30 225   | 014331          | 225             | black atramentized | polished | 20,0             | 347     |



52

786

# <sup>99</sup> Concretors' Nippers

### (Tower Pincers, Steel Fixers' Nippers)

DIN ISO 9242





99 04 250 PA



- to twist and cut wire in one operation: fast, reliable and economical
- unobtained precision and long service life make these the bestselling concretors' nippers in the world
- cutting edges additionally hardened; cutting edge hardness approx. 61 HRC
- High-grade special tool steel, forged, oil-hardened

#### 99 00 220 K12

with 12 mm head, particularly suitable for tile paving work







|               |                 |            |  | Dierr              |          |                | Cutting o | apacities |           |  |
|---------------|-----------------|------------|--|--------------------|----------|----------------|-----------|-----------|-----------|--|
| Article No.   | EAN<br>4003773- | l ←→<br>mm |  | Pliers             | Head     | Handles        | Ø mm      | Ø mm      | ے کے<br>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       | 335       |  |
| 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       | 427       |  |
| 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        |  | nickel plated      |          |                | 2,4       | 1,6       | 398       |  |
| 99 04 280     | 048220          | 280        |  |                    |          |                | 2,8       | 1,8       | 457       |  |

## <sup>99</sup> High Leverage Concretors' Nippers

high lever transmission

DIN ISO 9242

99 10 300





compared to conventional concretors' nippers of the same size.

- 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
- extra-slim form for tying deep mounted steel rods
- 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, oil-hardened





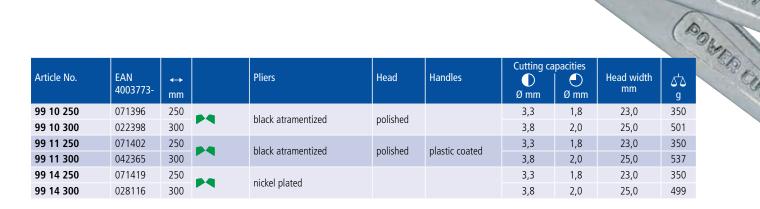
KNIPEK













### **Bolt End Cutting Nippers**

#### high lever transmission

DIN ISO 5743

61

#### powerful, compact, comfortable





61 02 200 <u>∡8</u>5° ►

- 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 electric steel; forged, oil-hardened



Almost flush cutting of bolts, nails etc.

#### 61 02 200



Extraordinary cutting performance: also for piano wire



Particularly efficient for fence construction

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

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                         | Pliers             | Head     | Handles                         | Cı<br>Ø mm | Ď   | pacities<br>Ø mm | O<br>Ø mm | ۲۵<br>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° ► <b>₹</b> | black atramentized | polished | with slim multi-component grips | 1.0 - 6.0  | 4.0 | 3.5              | 3.0       | 435     |

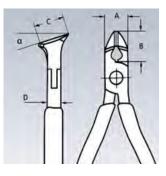
## **Electronics Oblique Cutting Nipper**

DIN ISO 9654

62



- 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, oil-hardened



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                          | Head     | Handles                    | Cutting ca<br>Ø mm | pacities<br>D<br>Ø mm | A<br>mm | Dimer<br>B<br>mm | nsions<br>D<br>mm | C<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------------------|----------|----------------------------|--------------------|-----------------------|---------|------------------|-------------------|---------|---------|
| 62 12 120   | 048008          | 120             | \$\$ ≰15° <b>/ </b> ⊂ MM | polished | with multi-component grips | 0.3 - 1.0          | 0.7                   | 11      | 10               | 7.5               | 17      | 93      |

## <sup>64</sup> Electronics End Cutting Nippers

DIN ISO 9654











- 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; hardness at least 56 HRC
- High-grade special tool steel, forged, oil-hardened

#### Style 0

End Cutter, with bevel

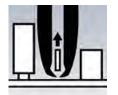
64 11 115 End Cutter, without bevel

**64 12 115** End Cutter, with small bevel

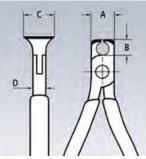
Style 2: End Cutter, mini-blade with small bevel

Style 3 Oblique End Cutter, short head, with small bevel,  $\alpha = 15^\circ$ 

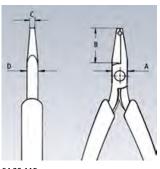
Style 4 Oblique End Cutter, short head, with small bevel,  $\alpha{=}27^\circ$ 



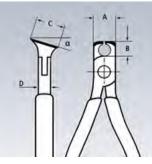
64 22 115



64 01/02/11/12



64 22 115



64 32/42/52



Style 5

Oblique End Cutter, short head, without bevel, for flush cutting,  $\alpha = 27^{\circ}$ 

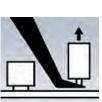
Style 6 Oblique End Cutter, mini-blade with small bevel,  $\alpha=65^\circ$ 

#### Style 7

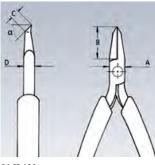
Oblique End Cutter, mini-blade with small bevel, head with recess,  $\alpha = 35^{\circ}$ 

**Pliers Sets**, see page 197





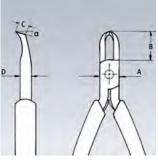
64 62 120



64 62 120



64 72 120



64 72 120

|             |                 |                  |   |       |                 |                            | Cutti | ng capa | cities |         | Dimer   |         |         |         |
|-------------|-----------------|------------------|---|-------|-----------------|----------------------------|-------|---------|--------|---------|---------|---------|---------|---------|
| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |   | Style | Head            | Handles                    | Ø mm  | Ø mm    | Ø mm   | A<br>mm | B<br>mm | D<br>mm | C<br>mm | ۵۵<br>g |
| 64 01 115   | 017745          | 115              | \$\$ <u>∡9</u> 0° ▶ <b> ⊂</b><br>MM                                 | 0     | polished        | plastic coated             | 2.0   | 1.0     | 0.6    | 11.0    | 6.0     | 7.5     | 16.0    | 76      |
| 64 02 115   | 035343          | 115              | \$\$ <u>∡9</u> 0° ► <b>●</b> (二)<br>MM                              | 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              | \$≹∡90° <b>/ ∖</b> ⊡<br>MM  | 1     | polished        | plastic coated             | 1.4   | 0.8     |        | 11.0    | 6.0     | 7.0     | 16.0    | 74      |
| 64 12 115   | 040743          | 115              | \$\$≰90° <mark>/ &lt;</mark> ⊆<br>MM                                | 1     | mirror polished | with multi-component grips | 2.0   | 0.8     | 0.5    | 11.0    | 6.0     | 7.0     | 16.0    | 91      |
| 64 22 115   | 017806          | 115              | \$\$ <u>∡9</u> 0° <mark>/                                   </mark> | 2     | mirror polished | with multi-component grips | 0.8   |         |        | 10.0    | 20.0    | 6.0     | 3.0     | 65      |
| 64 32 120   | 017820          | 120              | \$\$≰15° <mark>/ &lt;</mark> ⊆<br>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>/ &lt;</mark> ⊆<br>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              | \$≹ <u>∡2</u> 7° <b>Г</b> ⊆<br>MM                                   | 5     | mirror polished | with multi-component grips | 1.3   |         |        | 10.5    | 10.0    | 7.0     | 12.0    | 69      |
| 64 62 120   | 046998          | 120              | \$≹∡65° <mark>/ \</mark> []<br>MM                                   | 6     | mirror polished | with multi-component grips | 0.6   |         |        | 9.5     | 18.5    | 6.0     | 5.0     | 70      |
| 64 72 120   | 017882          | 120              | \$≹∡35° <mark>/                                   </mark>           | 7     | mirror polished | with multi-component grips | 1.5   |         |        | 12.0    | 19.5    | 7.0     | 5.0     | 95      |

#### 64 **Electronics End-Cutting Nippers ESD**

**DIN ISO 9654** 



#### 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
- precision pliers for ultra fine cutting work, e.g. in electronics and fine mechanics
- electrically discharging handles dissipative
- strudy, 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; hardness at least 56 HRC
- with two-colour dual component handles, black/grey
- High-grade special tool steel, forged, oil-hardened

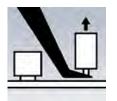


#### Style 1 End Cutter, with small bevel

Style 3 Oblique End Cutter, short head, with small bevel,  $a = 15^{\circ}$ 

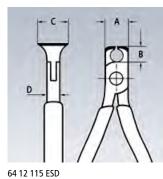
#### Style 6

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

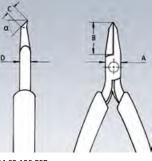


64 62 120 ESD

64 32 120 ESD



Pliers Sets, see page 197 



64 62 120 ESD



NIT

🛦 🕸 🖌 15° 🦰 🗔 MM

64 62 120 ESD

🛦 🕸 🔏 5° 🦰 🗔 MM

# <sup>67</sup> 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 coordination of cutting edge angle and transmission ratio
- cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- Chrome vanadium heavy-duty steel, forged, oil-hardened



|             |                 |            |                    |          |                            |     | ;   |     |            |      |
|-------------|-----------------|------------|--------------------|----------|----------------------------|-----|-----|-----|------------|------|
| Article No. | EAN<br>4003773- | <b>∢</b> > | Pliers             | Head     | Handles                    |     |     |     | $\bigcirc$ | Δ̈́Δ |
|             |                 | mm         |                    |          |                            | Ømm | Ømm | Ømm | Ømm        | 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        |                    |          |                            | 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  |

68

### End Cutting Nippers

DIN ISO 5748



- 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, oil-hardened



Also suitable for wire netting in reinforced concrete construction

| 68 | 01 | 180 |
|----|----|-----|
|    |    |     |

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers             | Head     | Handles        |     | ng capac<br>D<br>Ø mm | $\bigcirc$ | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------------|----------|----------------|-----|-----------------------|------------|---------|
| 68 01 160   | 013792          | 160             |                    |          |                | 4.0 | 2.8                   | 2.3        | 202     |
| 68 01 180   | 013808          | 180             | black atramentized | polished | plastic coated | 4.0 | 3.2                   | 2.5        | 284     |
| 68 01 200   | 013815          | 200             |                    |          |                | 4.0 | 3.5                   | 2.8        | 319     |

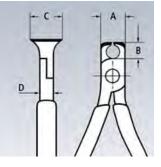


### End Cutting Nippers for mechanics

DIN ISO 5748



- 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, oil-hardened



|             |          |            |                    |          |                | C         | utting ca | pacities |         |    | Dimer | nsions |    |     |
|-------------|----------|------------|--------------------|----------|----------------|-----------|-----------|----------|---------|----|-------|--------|----|-----|
| Article No. | EAN      | <b>∢</b> ► | Pliers             | Head     | Handles        |           |           |          | $\circ$ | А  | В     | D      | С  | 5   |
|             | 4003773- | mm         |                    |          |                | Ømm       | Ømm       | Ømm      | Ømm     | mm | mm    | mm     | mm | g   |
| 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 | 111 |
| 69 03 130   | 018001   | 130        | chrome plated      |          | plastic coated | 0.4 - 2.0 | 1.3       | 1.0      | 0.8     | 16 | 7.5   | 10     | 20 | 111 |



**Diagonal Cutters** 

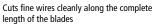
### 70

# DIN ISO 5749 70 01 160 70 02 160 PA 70 05 160 PA

• the essential cutting tool for versatile use

- high quality material and precise workmanship for long service life
- precision cutting edges additionally induction hardened (cutting edge hardness approx. 62 HRC) for soft and hard wire
   clean cutting of thin copper wires, also at the cutting-edge tips
- narrow head style for use in confined areas
  Vanadium electric steel; forged, oil-hardened







Slim head style and precise cut at blade tips: Advantageous when working in confined areas



70 06 160 £1000V @ € ►

|             |                 |          |                  |                       |                                 |   | Cutti | ng capa | cities     |     |
|-------------|-----------------|----------|------------------|-----------------------|---------------------------------|---|-------|---------|------------|-----|
| Article No. | EAN<br>4003773- | <b>-</b> |                  | Pliers                | Head                            | Handles   |       |         | $\bigcirc$ | ΔΔ  |
|             |                 | mm       |                  |                       |                                 |   | Ømm   | Ømm     | Ømm        | g   |
| 70 01 110   | 014324          | 110      |                  |                       |                                 |   | 3.0   | 2.0     | 1.2        | 80  |
| 70 01 125   | 013402          | 125      |                  | 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 01 160   | 013426          | 160      |                  |                       |                                 |   | 4.0   | 2.8     | 2.0        | 171 |
| 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                 | polished                        | with multi-component grips                          | 4.0   | 2.5     | 1.8        | 150 |
| 70 02 160   | 034032          | 160      |                  | atramentized          | polisileu                       | with multi-component grips                          | 4.0   | 2.8     | 2.0        | 206 |
| 70 02 180   | 034049          | 180      |                  |                       |                                 |   | 4.0   | 3.0     | 2.5        | 252 |
| 70 04 140   | 018100          | 140      |                  | chrome plated         |                                 |   | 4.0   | 2.5     | 1.8        | 114 |
| 70 05 125   | 039501          | 125      |                  |                       |                                 |   | 3.0   | 2.3     | 1.5        | 119 |
| 70 05 140   | 039488          | 140      |                  |                       |                                 |   | 4.0   | 2.5     | 1.8        | 154 |
| 70 05 160   | 039600          | 160      |                  | chrome plated         | ated with multi-component grips | with multi-component grips                          | 4.0   | 2.8     | 2.0        | 207 |
| 70 05 180   | 043706          | 180      |                  |                       |                                 |   | 4.0   | 3.0     | 2.5        | 246 |
| 70 06 125   | 018124          | 125      |                  |                       |                                 |   | 3.0   | 2.3     | 1.5        | 121 |
| 70 06 140   | 040293          | 140      |                  |                       |                                 | insulated with multi-component                      | 4.0   | 2.5     | 1.8        | 160 |
| 70 06 160   | 021995          | 160      | £ 1000 V 🖄 🚰 ▶ ◀ | chrome plated         |                                 | grips, VDE-tested                                   | 4.0   | 2.8     | 2.0        | 216 |
| 70 06 180   | 033813          | 180      |                  |                       |                                 |   | 4.0   | 3.0     | 2.5        | 254 |
| 70 07 160   | 018155          | 160      |                  |                       |                                 |   | 4.0   | 2.8     | 2.0        | 227 |
| 70 07 180   | 018179          | 180      | <u> </u>         | chrome plated         |                                 | with dipped insulation, VDE-tested                  | 4.0   | 3.0     | 2.5        | 269 |
| 70 11 110   | 018193          | 110      |                  | black<br>atramentized | polished                        | plastic coated                                      | 3.0   | 2.0     | 1.2        | 91  |
| 70 15 110   | 029649          | 110      | ▶ <b>へ</b> ₩     | chrome plated         |                                 | with multi-component grips                          | 3.0   | 2.0     | 1.2        | 98  |
| 70 26 160   | 018223          | 160      | <u> </u>         | chrome plated         |                                 | insulated with multi-component<br>grips, VDE-tested | 4.0   | 2.8     | 1.8        | 216 |

### KNIPEX CoBolt<sup>®</sup> Compact Bolt Cutters

DIN ISO 5743









71 22 200 <u>∡2</u>0° ▶**●** ₩



```
<u>√2</u>0°
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The ingenious lever-action mechanism ensures an extremely favourable lever ratio with very little friction. The cutting force is about 20 times higher than the hand force applied.

#### Clever muscle man

- precision cutting edges for soft and hard wire and 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, oil-hardened

#### 71 02 200

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

#### 71 12 200 / 71 22 200 / 71 32 200

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

#### Style 2

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

#### Style 3

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

#### Style 4

the recess in the blade allows easier cutting of thicker wires, e.g. for anchor bolts in false ceilings; 20° angled head with single-sided joint bar and diagonal cutting edge for flush cutting; with space for gripping



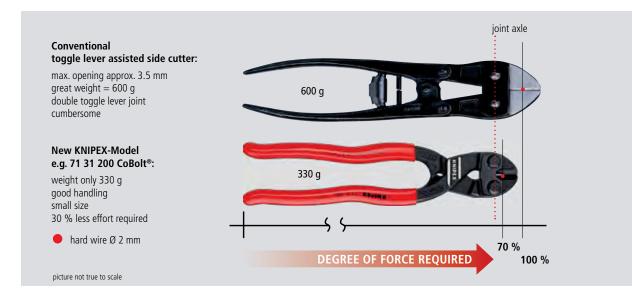
Opening spring and transport lock





Comparison between 71 0x 200 and 71 2x 200

### **CUTTING PLIERS**





71 31/32/41 200: The cutting edge recess near the joint holds thicker wires in a favourable cutting position (optimum lever ratio). The re-positioning that is usual with bolt cutters is not needed here.



|             |                 |                |                            |       |                    |                                 | (    | Cutting c | apacities | ;         |         |
|-------------|-----------------|----------------|----------------------------|-------|--------------------|---------------------------------|------|-----------|-----------|-----------|---------|
| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |                            | Style | Pliers             | Handles                         | Ø mm | Ø mm      | Ø mm      | O<br>Ø mm | ۵۵<br>g |
| 71 01 200   | 033165          | 200            | ▶◀                         | 0     | black atramentized | plastic coated                  | 6.0  | 5.2       | 4.0       | 3.6       | 335     |
| 71 02 200   | 047056          | 200            | ▶◀                         | 0     | black atramentized | with slim multi-component grips | 6.0  | 5.2       | 4.0       | 3.6       | 365     |
| 71 12 200   | 066859          | 200            |                            | 1     | black atramentized | with slim multi-component grips | 6.0  | 5.2       | 4.0       | 3.6       | 375     |
| 71 21 200   | 066866          | 200            | <u>∡2</u> 0° ▶◀            | 2     | black atramentized | plastic coated                  | 6.0  | 5.2       | 4.0       | 3.6       | 320     |
| 71 22 200   | 066873          | 200            | <u>∡2</u> 0° ▶ <b>٩</b> MM | 2     | black atramentized | with slim multi-component grips | 6.0  | 5.2       | 4.0       | 3.6       | 375     |
| 71 31 200   | 042327          | 200            | ▶◀                         | 3     | black atramentized | plastic coated                  | 6.0  | 5.2       | 4.0       | 3.6       | 330     |
| 71 32 200   | 066880          | 200            |                            | 3     | black atramentized | with slim multi-component grips | 6.0  | 5.2       | 4.0       | 3.6       | 370     |
| 71 41 200   | 066897          | 200            | <u>⊀2</u> 0° ►٩            | 4     | black atramentized | plastic coated                  | 6.0  | 5.2       | 4.0       | 3.6       | 335     |

# Bolt Cutters

cuts hard components up to 48 HRC









71 72 910

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, transmission ratio and ergonomic handle shape
- bolted cutter head, replaceable
- Blade: chrome vanadium heavy-duty steel, forged, oil-hardened
- Joint: special tool steel, forged
- Handle: steel tube, powder-coated







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



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Head              | Handles                    | Cut<br>HRC 19<br>Ø mm | ting capac<br>HRC 40<br>Ø mm | ities<br>HRC 48<br>Ø mm | ۲<br>ع |
|-------------|-----------------|-----------------|-------------------|----------------------------|-----------------------|------------------------------|-------------------------|--------|
| 71 72 460   | 066750          | 460             | grey atramentized | with multi-component grips | 8                     | 6                            | 5                       | 2100   |
| 71 72 610   | 066767          | 610             | grey atramentized | with multi-component grips | 9                     | 8                            | 7                       | 2550   |
| 71 72 760   | 066774          | 760             | grey atramentized | with multi-component grips | 11                    | 9                            | 8                       | 4250   |
| 71 72 910   | 066781          | 910             | grey atramentized | with multi-component grips | 13                    | 10                           | 9                       | 4950   |
|             |                 |                 |                   |                            |                       |                              |                         |        |

| 71 79 460 | 066804 | Spare cutter head for 7 |
|-----------|--------|-------------------------|
| 71 79 610 | 066811 | Spare cutter head for 7 |
| 71 79 760 | 066828 | Spare cutter head for 7 |
| 71 79 910 | 066835 | Spare cutter head for 7 |
|           |        |                         |

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

#### <sup>71</sup> <sup>82</sup> Concrete Mesh Cutter



- cutting capacity up to 48 HRC hardness
- robust cutting edges 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, transmission ratio and ergonomic handle shape
- bolted cutter head, replaceable
- Blade: chrome vanadium heavy-duty steel, forged, oil-hardened
- Joint: special tool steel, forged
- Handle: steel tube, powder-coated







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

|             |          |       |  |                            |     | ting capac |        |      |  |  |
|-------------|----------|-------|--|----------------------------|-----|------------|--------|------|--|--|
| Article No. | EAN      | <->   | Head   | Handles                    |     |            | HRC 48 | 52   |  |  |
|             | 4003773- | mm    |  |                            | Ømm | Ømm        | Ømm    | g    |  |  |
| 71 82 950   | 066798   | 950   | grey atramentized                                | with multi-component grips | 11  | 9          | 6      | 4060 |  |  |
|             |          |       |  |                            |     |            |        |      |  |  |
| 71 89 950   | 066842   | Spare | e cutter head for 71 82 950 complete with screws |                            |     |            |        |      |  |  |

# 72 Diagonal Cutters for plastics

DIN ISO 5743





72 21 160 <u>∡8</u>5° **Г** ₩

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |                             | Head     | Handles                    | ۲۵<br>g |
|-------------|-----------------|----------------|-----------------------------|----------|----------------------------|---------|
| 72 01 140   | 043713          | 140            |                             |          |                            | 125     |
| 72 01 160   | 041245          | 160            | M N                         | polished | plastic coated             | 164     |
| 72 01 180   | 046837          | 180            |                             |          |                            | 193     |
| 72 02 125   | 044215          | 125            | M N                         | polished | with multi-component grips | 109     |
| 72 11 160   | 046813          | 160            | <u>∡4</u> 5° <b>/ ヽ</b> ₩   | polished | plastic coated             | 156     |
| 72 21 160   | 046820          | 160            | <u>∡</u> 85° <b>/ ``</b> MM | polished | plastic coated             | 165     |

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





### Diagonal Cutter for fibre optics (glass fibre cable)

DIN ISO 5743



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



The KEVLAR® fibres in strain relief are cut with the 95 03 160 shears.

| ŀ | Article No. | EAN<br>4003773- | <b>←→</b><br>mm |          | Head     | Handles        | ۵ <sup>۲</sup> ۵<br>g |
|---|-------------|-----------------|-----------------|----------|----------|----------------|-----------------------|
| 7 | 72 51 160   | 028031          | 160             | <b>M</b> | polished | plastic coated | 166                   |



# 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, transmission ratio and ergonomic handle shape
- cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC
- Chrome vanadium heavy-duty steel, forged, oil-hardened



The cutting edges are in the centre of the cutter head

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |    | Pliers             | Head     | Handles        |     | Cutting c<br>D<br>Ø mm |     | s<br>O<br>Ø mm | ۵'ک<br>g |
|-------------|-----------------|-----------------|----|--------------------|----------|----------------|-----|------------------------|-----|----------------|----------|
| 74 91 250   | 034070          | 250             | ▶◀ | black atramentized | polished | plastic coated | 5.0 | 5.0                    | 3.8 | 3.5            | 395      |

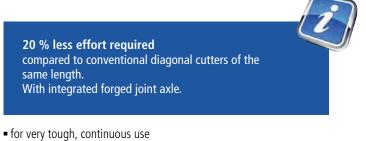
· · · · · ·

### High Leverage Diagonal Cutters

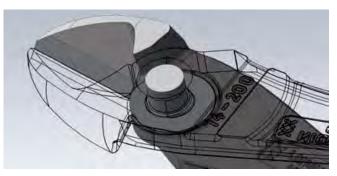
DIN ISO 5749

74





- high cutting performance with minimum effort due to optimum
- co-ordination of the cutting edge angle, transmission ratio and ergonomic handle shape
- 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, oil-hardened



With integrated forged joint axle for very tough, continuous use

#### Style 1

with opening spring; to be activated if required



74 12: opening spring in deactivated position



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

Style 2 12° angled head offers clearance for gripping

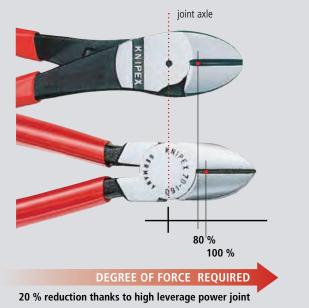


20 % less hand force required

#### leverage comparison between the diagonal cutter <=> high leverage diagonal cutter

**High transmission of power** High Leverage Diagonal Cutter: 290 N hand force required to cut hard wire (dia. 2 mm)

Standard transmission of power Diagonal Cutter: 370 N hand force required to cut hard wire (dia. 2 mm)





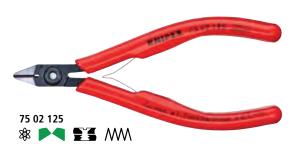


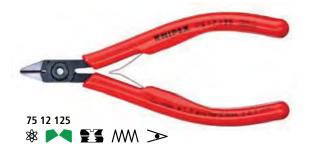
hard wire (dia. 2 mm)

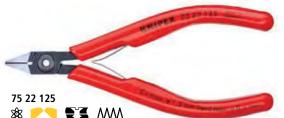
|             |                 |           |                 |       |                     |           |   | Cutti       | ng capa     | cities      |                 |
|-------------|-----------------|-----------|-----------------|-------|---------------------|-----------|---|-------------|-------------|-------------|-----------------|
| Article No. | EAN<br>4003773- | <b>-</b>  |                 | Style | Pliers              | Head      | Handles   |             |             | $\bigcirc$  | $\Delta \Delta$ |
| 74 01 140   | 039747          | mm<br>140 |                 |       |                     |           |   | Ø mm<br>3.1 | Ø mm<br>2.0 | Ø mm<br>1.5 | g<br>131        |
| 74 01 140   | 033141          | 140       |                 |       |                     |           |   | 3.4         | 2.0         | 2.0         | 178             |
| 74 01 180   | 022008          | 180       | P4              | 0     | black atramentized  | polished  | plastic coated                                      | 3.8         | 2.5         | 2.0         | 241             |
| 74 01 200   | 022008          | 200       |                 | 0     | DIACK ALIAMENLIZEU  | polisileu | plastic coateu                                      | 4.2         | 3.0         | 2.2         | 241             |
| 74 01 250   | 034050          | 250       |                 |       |                     |           |   | 4.6         | 3.5         | 3.0         | 391             |
| 74 02 140   | 042419          | 140       |                 |       |                     |           |   | 3.1         | 2.0         | 1.5         | 157             |
| 74 02 140   | 023081          | 160       |                 |       |                     |           |   | 3.4         | 2.5         | 2.0         | 209             |
| 74 02 180   | 023074          | 180       | <b>P4</b>       | 0     | black atramentized  | nolished  | with multi-component grips                          | 3.8         | 2.7         | 2.2         | 273             |
| 74 02 200   | 040309          | 200       |                 | Ŭ     | black attainentized | ponstica  | with mater component grips                          | 4.2         | 3.0         | 2.5         | 304             |
| 74 02 250   | 042402          | 250       |                 |       |                     |           |   | 4.6         | 3.5         | 3.0         | 437             |
| 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       | <b>Pq</b>       | 0     | chrome 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       | • ·····         |       |                     |           |   | 3.8         | 2.7         | 2.2         | 280             |
| 74 06 200   | 033820          | 200       | <u> </u>        | 0     | chrome plated       |           | insulated with multi-component<br>grips, VDE-tested | 4.2         | 3.0         | 2.5         | 308             |
| 74 06 250   | 041955          | 250       |                 |       |                     |           | gips, voe tested                                    | 4.6         | 3.5         | 3.0         | 453             |
| 74 07 200   | 018414          | 200       | <u> </u>        |       |                     |           | with dipped insulation,                             | 4.2         | 3.0         | 2.5         | 328             |
| 74 07 250   | 018421          | 250       |                 | 0     | chrome plated       |           | VDE-tested  | 4.6         | 3.5         | 3.0         | 510             |
| 74 12 160   | 065111          | 160       |                 |       |                     |           |   | 3.4         | 2.5         | 2.0         | 209             |
| 74 12 180   | 060192          | 180       |                 | 1     | black atramentized  | polished  | with multi-component grips                          | 3.8         | 2.7         | 2.2         | 273             |
| 74 21 160   | 034322          | 160       |                 |       |                     |           |   | 3.4         | 2.5         | 2.0         | 181             |
| 74 21 180   | 069973          | 180       | <u>√1</u> 2° ▶◀ | 2     | black atramontized  | poliched  | plastic coated                                      | 3.8         | 2.7         | 2.2         | 235             |
| 74 21 200   | 050483          | 200       | X12"            | 2     | black atramentized  | polished  | plastic coated                                      | 4.2         | 3.0         | 2.5         | 258             |
| 74 21 250   | 045021          | 250       |                 |       |                     |           |   | 4.6         | 3.5         | 3.0         | 390             |
| 74 22 200   | 051831          | 200       |                 |       |                     |           |   | 4.2         | 3.0         | 2.5         | 300             |
| 74 22 250   | 071372          | 250       | <u>∡1</u> 2° ▶◀ | 2     | black atramentized  | polished  | with multi-component grips                          | 4.6         | 3.5         | 3.0         | 437             |

### <sup>75</sup> 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, oil-hardened

#### Style 0

with bevel

Style 1 with bevel and lead catcher, no uncontrolled loss of cut wire ends

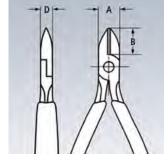
Style 2 with small bevel

Style 5 particularly narrow head, with bevel



Bolted joint





|             |                 |                  |   |       |           |                    | Cı        | utting ca | oacities |      | Di      | mensio  | ns      |                       |
|-------------|-----------------|------------------|---|-------|-----------|--------------------|-----------|-----------|----------|------|---------|---------|---------|-----------------------|
| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |   | Style | Pliers    | Handles            | Ø mm      | Ø mm      | Ø mm     | Ø mm | A<br>mm | B<br>mm | D<br>mm | ۵ <sup>۲</sup> ۵<br>g |
| 75 02 125   | 040491          | 125              | * <b>* * * * * *</b><br>/WM                         | 0     | burnished | with plastic grips | 0.2 - 1.3 | 1.0       | 0.6      | 0.4  | 10.5    | 14      | 6.5     | 81                    |
| 75 12 125   | 040514          | 125              | & ► <b>S</b>  | 1     | burnished | with plastic grips | 0.2 - 1.3 | 1.0       | 0.6      | 0.4  | 10.5    | 14      | 6.5     | 80                    |
| 75 22 125   | 040538          | 125              | & <mark>/                                   </mark> | 2     | burnished | with plastic grips | 0.2 - 1.3 | 0.9       | 0.4      | 0.3  | 10.5    | 14      | 6.5     | 79                    |
| 75 52 125   | 040576          | 125              | & ► <b>1</b> 5 3<br>MM                              | 5     | burnished | with plastic grips | 0.2 - 0.8 | 0.5       | 0.3      |      | 10.5    | 14      | 6.5     | 79                    |

75 52 125

🕸 🎮 🗾 MM

### 76 Diagonal Cutters for electromechanics

DIN ISO 5749





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

#### Style 1

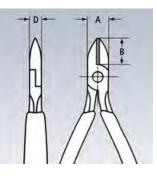
low-friction double spring for gentle and even opening

#### Style 2

without bevel for flush cutting of soft wires; low-friction double spring for gentle and even opening

#### Style 8

particularly tapered head with small bevel for work in confined areas (cable harnesses, multiple stranded wires)



|             |                 |                 |                   |                       |          |                                 | C         | utting ca | pacities |           | Dir     | nensio  | ns      |        |
|-------------|-----------------|-----------------|-------------------|-----------------------|----------|---------------------------------|-----------|-----------|----------|-----------|---------|---------|---------|--------|
| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                   | Pliers                | Head     | Handles                         | Ø mm      | Ø mm      | Ø mm     | O<br>Ø mm | A<br>mm | B<br>mm | D<br>mm | ے<br>م |
| 76 01 125   | 018490          | 125             | ¥ ►               | black<br>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             | XR ►              | chrome plated         |          | with multi-com-<br>ponent grips | 0.4 - 2.5 | 1.8       | 1.0      | 0.6       | 14.5    | 16      | 9       | 118    |
| 76 12 125   | 048015          | 125             | x¥ ► <b>(</b> MM) | black<br>atramentized | polished | with multi-com-<br>ponent grips | 0.4 - 2.5 | 1.8       | 1.0      | 0.6       | 14.5    | 16      | 9       | 112    |
| 76 22 125   | 048022          | 125             | ₩ <b>/ \</b>      | black<br>atramentized | polished | with multi-com-<br>ponent grips | 0.4 - 2.5 |           |          |           | 14.5    | 16      | 9       | 107    |
| 76 81 125   | 018544          | 125             | 888 🦰             | black<br>atramentized | polished | plastic coated                  | 0.4 - 1.7 | 1.3       | 0.8      |           | 14.5    | 16      | 9       | 87     |

# Electronics Diagonal Cutters DIN ISO 9654



77 42 115

黎 🔼 (二、MM)

🕸 🎮 🖾 MM



77 52 115

₩ **/**  5 KM

- 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, oil-hardened

#### 77 01 115

round head, with bevel

77 02 115 round head, with small bevel

#### 77 11 115

round head, with bevel and lead catcher – no uncontrolled loss of cut wire ends

77 21 115 pointed head, without bevel





**77 22 115** round head, without bevel; cutting edge hardness approx. 57 HRC

77 32 115 pointed head, with small bevel

**77 42 115** pointed head, without bevel; cutting edge hardness approx. 57 HRC

#### 77 52 115

pointed, flat head, with small bevel; cutting edge hardness approx. 57 HRC

77 72 115 pointed mini-head, with small bevel

Pliers Sets, see page 197

|             |          |            |                          |                    |                            | Cuttin    | g capacit | ies | Di   | imensio | ns  |     |
|-------------|----------|------------|--------------------------|--------------------|----------------------------|-----------|-----------|-----|------|---------|-----|-----|
| Article No. | EAN      | <b>∢</b> → |                          | Head               | Handles                    |           |           |     | В    | Α       | D   | 5   |
|             | 4003773- | mm         |                          |                    |                            | Ømm       | Ømm       | Ømm | mm   | mm      | mm  | g   |
| 77 01 115   | 018568   | 115        |                          | polished           | plastic control            | 0.3 - 1.6 | 1.2       | 0.6 | 14.0 | 11.0    | 7.5 | 67  |
| 77 01 130   | 018575   | 130        |                          | polisned           | plastic coated             | 0.3 - 2.0 | 1.5       | 0.8 | 18.0 | 15.0    | 9.5 | 108 |
| 77 02 115   | 039334   | 115        | * <b> :</b> EI MM        | mirror<br>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        | * <b>&gt;</b>            | mirror<br>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        | * <b>&gt;</b>            | polished           | plastic coated             | 0.3 - 1.6 | 1.2       | 0.6 | 14.0 | 11.0    | 7.5 | 70  |
| 77 12 115   | 043768   | 115        | ¢₩₽₹⊠₩≫                  | mirror<br>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        | * <b>* *</b>             | polished           | plastic coated             | 0.3 - 1.3 | 1.0       |     | 14.0 | 11.0    | 7.5 | 64  |
| 77 21 130   | 018667   | 130        |                          | polisileu          | plastic coateu             | 0.3 - 1.6 | 1.3       |     | 18.0 | 14.0    | 9.5 | 110 |
| 77 22 115   | 043782   | 115        | * 🔨 🖂 *                  | mirror<br>polished | with multi-component grips | 0.3 - 1.3 | 1.0       |     | 14.0 | 11.0    | 7.0 | 80  |
| 77 22 130   | 040446   | 130        | * <mark>- 1</mark> [] MM | mirror<br>polished | with multi-component grips | 0.3 - 2.0 | 1.5       |     | 18.0 | 15.0    | 9.0 | 124 |
| 77 32 115   | 044307   | 115        | * <b>~</b>               | mirror<br>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        |                          | mirror             | with multi component gring | 0.3 - 1.3 | 0.8       |     | 14.0 | 11.0    | 7.5 | 80  |
| 77 42 130   | 018773   | 130        |                          | polished           | with multi-component grips | 0.3 - 1.6 | 1.3       |     | 18.0 | 15.0    | 9.5 | 122 |
| 77 52 115   | 040750   | 115        | * 🔫 🖂 🕷                  | mirror<br>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        | * <b> :</b> Ei MM        | mirror<br>polished | with multi-component grips | 0.3 - 0.8 |           |     | 10.5 | 9.5     | 6.0 | 69  |

77 72 115

88 **- 1** 5 MM

### Electronics Diagonal Cutters ESD

DIN ISO 9654





77 12 115 ESD ▲ 黎 ▶◀ № >





🛦 🕸 🦰 🗔 MM

77 32 115 ESD

77 42 115 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
- for fine cutting work, e.g. in electronics and fine mechanics
- electrically discharging handles dissipative
- sturdy, zero-backlash box joint
- Iow-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, oil-hardened

77 02 115 ESD round head, with small bevel

**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

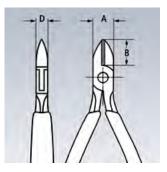
77 42 115 ESD pointed head, without bevel

77 52 115 ESD pointed, flat head, with small bevel

77 72 115 ESD pointed mini-head, with small bevel

**Pliers Sets**, see page 197





|               |                 |                  |            |                 |                                 | Cuttin    | ig capaci | ties | Di      | mensio  | ns      |                       |
|---------------|-----------------|------------------|------------|-----------------|---------------------------------|-----------|-----------|------|---------|---------|---------|-----------------------|
| Article No.   | EAN<br>4003773- | <b>⊶</b> →<br>mm |            | Head            | Handles                         | Ø mm      | Ø mm      | Ø mm | B<br>mm | A<br>mm | D<br>mm | ۵ <sup>۲</sup> ۵<br>g |
| 77 02 115 ESD | 025092          | 115              | 🛦 🕸 🦰 🖾 MM | mirror polished | with multi-compo-<br>nent 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-compo-<br>nent 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-compo-<br>nent 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-compo-<br>nent 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-compo-<br>nent 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-compo-<br>nent grips | 0.3 - 1.0 | 0.8       | 0.5  | 11.5    | 14.0    | 7.0     | 79                    |
| 77 72 115 ESD | 024330          | 115              | 🛦 🕸 🦰 🖂 MM | mirror polished | with multi-compo-<br>nent grips | 0.3 - 0.8 |           |      | 10.5    | 9.5     | 6.0     | 69                    |

# <sup>78</sup> Electronic *Super Knips*®

DIN ISO 9654







78 13 125 🕸 🔼 MM >>





78 31 125 🕸 💌 MM



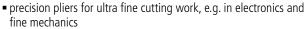
78 41 125 🕸 💌 MM 🍉



78 61 125 🕸 💌 🕅



78 71 125 🕸 🔼 MM >>



- ground, very sharp cutting edges without bevel for flush cutting
- 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 restricted opening
- in INOX or special tool steel

#### 78 03 125 / 78 23 125

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

#### 78 13 125

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, burnished

#### 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, burnished

#### 78 61 125

cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC; also suitable for cutting glass fibre cables (fibre optics)

#### 78 71 125

special tool steel, burnished; with lead catcher – no uncontrolled loss of cut wire ends; cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC

#### 78 81 125

precision ground cutting edges with very small bevel suitable **also for hard wire**; special tool steel, burnished; 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, burnished; cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC



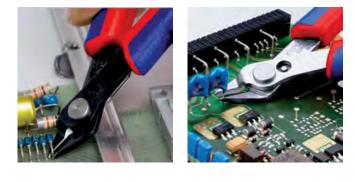
78 81 125 8 **7** MM



78 91 125 🕸 🔼 MM >>



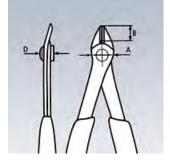




78 03 125

optimum cutting-edge geometry: precise, easy cutting even if strands are resting on a board

0



 restricted opening for ergonomic hand spreading width grooves for non-slip grip when applying a little pressure

|             |                 |         |                                  |           |          |                               | Cuttin    | g capaci | ties | Di      | mensio  | ns      |         |
|-------------|-----------------|---------|----------------------------------|-----------|----------|-------------------------------|-----------|----------|------|---------|---------|---------|---------|
| Article No. | EAN<br>4003773- | ↔<br>mm |                                  | Pliers    | Head     | Handles                       | Ø mm      | Ø mm     | Ø mm | B<br>mm | A<br>mm | D<br>mm | ۵۵<br>g |
| 78 03 125   | 035381          | 125     | X8 🚩 MM                          |           | polished | with multi-component grips    | 0.2 - 1.6 | 1.0      |      | 9.0     | 13.5    | 7.5     | 56      |
| 78 13 125   | 035398          | 125     | * <b>/</b> \\\\>                 |           | polished | with multi-component grips    | 0.2 - 1.6 | 1.0      |      | 9.0     | 13.5    | 7.5     | 57      |
| 78 23 125   | 043096          | 125     | \$\$ <u>∡6</u> 0° <b>/ ` </b> ₩₩ |           | polished | with multi-component<br>grips | 0.2 - 1.0 | 0.6      |      | 5.5     | 13.5    | 7.5     | 55      |
| 78 31 125   | 039778          | 125     | X88 🗾 MMV                        | burnished |          | with multi-component grips    | 0.2 - 1.0 |          |      | 9.0     | 12.5    | 7.5     | 55      |
| 78 41 125   | 040767          | 125     | ≉ <b>/</b> \\\/>                 | burnished |          | with multi-component grips    | 0.2 - 1.0 |          |      | 9.0     | 12.5    | 7.5     | 57      |
| 78 61 125   | 035404          | 125     | X8 🔽 🕅                           | burnished |          | with multi-component grips    | 0.2 - 1.6 | 1.2      |      | 9.0     | 13.5    | 7.5     | 56      |
| 78 71 125   | 043799          | 125     | * <b>*</b>                       | burnished |          | with multi-component grips    | 0.2 - 1.6 | 1.2      |      | 9.0     | 13.5    | 7.5     | 57      |
| 78 81 125   | 065074          | 125     | * <b>* * * *</b>                 | burnished |          | with multi-component<br>grips | 0.2 - 1.6 | 1.2      | 0.6  | 9.0     | 13.5    | 7.5     | 57      |
| 78 91 125   | 065081          | 125     | * <b>~</b> MM >>                 | burnished |          | with multi-component grips    | 0.2 - 1.6 | 1.2      | 0.6  | 9.0     | 13.5    | 7.5     | 57      |

### Electronic Super Knips® ESD

DIN ISO 9654









#### 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
- precision pliers for ultra fine cutting work, e.g. in electronics and fine mechanics
- electrically discharging handles dissipative
- ground, very sharp cutting edges without bevel for flush cutting
- precision shaped tips cut wires resting on a board from 0.2 mm dia.
- joint with stainless steel rivet
- extremely smooth movement for minimum operator fatigue
- with opening spring and restricted opening

#### 78 03 125 ESD

INOX - stainless steel; cutting edge hardness approx. 54 HRC

#### 78 13 125 ESD

 ${\rm INOX}$  - stainless steel; cutting edge hardness approx. 54 HRC; with lead catcher – no uncontrolled loss of cut wire ends

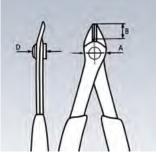
#### 78 61 125 ESD

cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC; special tool steel, burnished

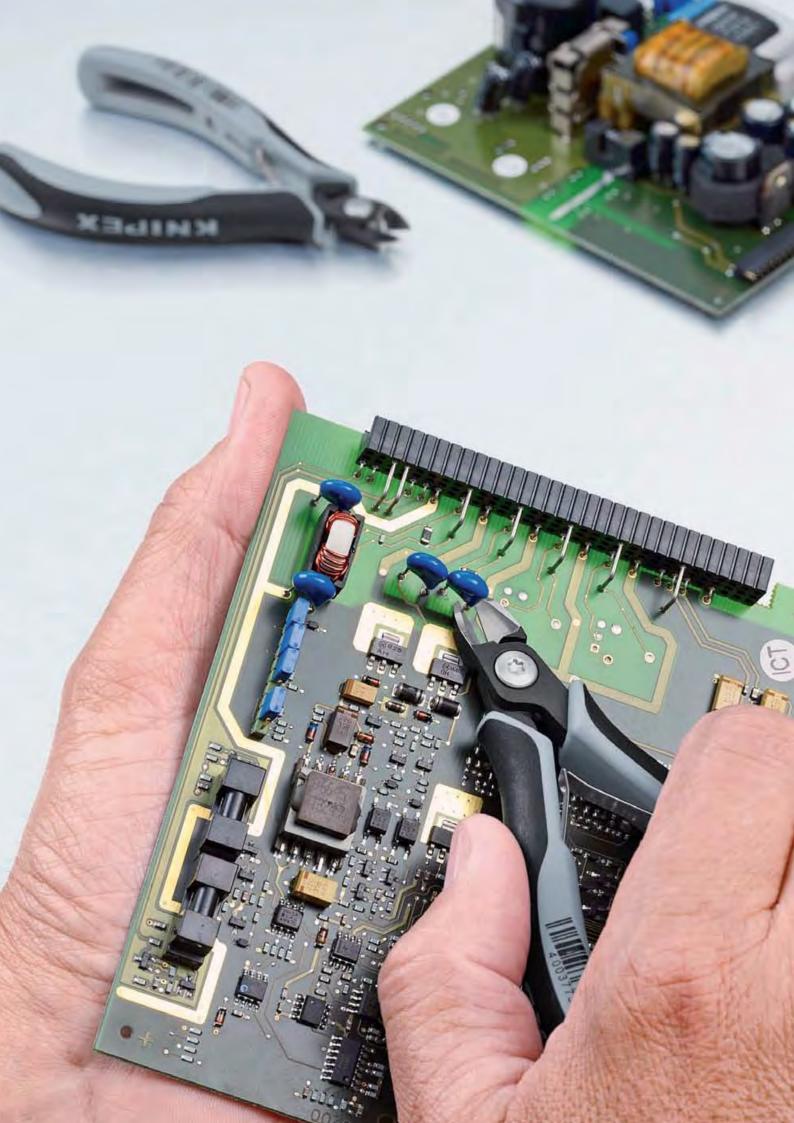
#### 78 71 125 ESD

with lead catcher – no uncontrolled loss of cut wire ends; cutting edges additionally induction hardened, cutting edge hardness approx. 64 HRC; special tool steel, burnished





|               |          |          |             |           |          |                            | Cutting c | apacities | Dii | mensio | ns  |    |  |
|---------------|----------|----------|-------------|-----------|----------|----------------------------|-----------|-----------|-----|--------|-----|----|--|
| Article No.   | EAN      | <b>→</b> |             | Pliers    | Head     | Handles                    |           |           | В   | А      | D   | 52 |  |
|               | 4003773- | mm       |             |           |          |                            | Ø mm      | Ømm       | mm  | mm     | mm  | g  |  |
| 78 03 125 ESD | 025146   | 125      | 🛦 🕸 🖊 🕷     |           | polished | with multi-component grips | 0.2 - 1.6 | 1.0       | 9.0 | 13.5   | 7.5 | 55 |  |
| 78 13 125 ESD | 025153   | 125      | ▲ 🕸 🖍 🔪 🔊 🔊 |           | polished | with multi-component grips | 0.2 - 1.6 | 1.0       | 9.0 | 13.5   | 7.5 | 57 |  |
| 78 61 125 ESD | 025184   | 125      | 🛦 🕸 🖊       | burnished |          | with multi-component grips | 0.2 - 1.6 | 1.2       | 9.0 | 13.5   | 7.5 | 56 |  |
| 78 71 125 ESD | 025191   | 125      | ▲ *         | burnished |          | with multi-component grips | 0.2 - 1.6 | 1.2       | 9.0 | 13.5   | 7.5 | 57 |  |



### 



NM 🛃 F

79 32 125

888 🔰

**Pliers Sets**, see page 197

#### The subtle difference

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

- 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
- forged from chrome vanadium ball-bearing steel

#### **79 02 120 / 79 22 120** mini-head

**79 02 125 / 79 22 125** round head

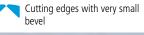
**79 12 125** specially for cutting through hard wire and piano wire

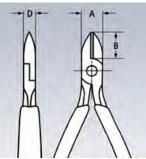
Cutting edges without bevel



**79 32 125 / 79 42 125** pointed head

**79 52 125 / 79 62 125** pointed head; with lead catcher – no uncontrolled loss of cut wire ends





|             |                 |                |                        |           |          |                                 | C         | utting ca | pacities |      | Di      | mensio  | ns      |         |
|-------------|-----------------|----------------|------------------------|-----------|----------|---------------------------------|-----------|-----------|----------|------|---------|---------|---------|---------|
| Article No. | EAN<br>4003773- | <b>→</b><br>mm |                        | Pliers    | Head     | Handles                         | Ø mm      | Ø mm      | Ø mm     | Ø mm | B<br>mm | A<br>mm | D<br>mm | ۵۵<br>g |
| 79 02 120   | 061403          | 120            | MM 22 🖍 🐝              | burnished | polished | with multi-compo-<br>nent grips | 0.2 - 1.4 | 1.0       | 0.6      |      | 6.5     | 9       | 6.5     | 57      |
| 79 02 125   | 061281          | 125            | AM 🗾 🔪 🕸               | burnished | polished | with multi-compo-<br>nent grips | 0.2 - 1.7 | 1.3       | 0.7      |      | 10      | 11      | 6.5     | 59      |
| 79 12 125   | 071365          | 125            | * <b>* * * * * *</b> * | burnished | polished | with multi-compo-<br>nent grips | 0.3 - 1.7 | 1.3       | 1.0      | 0.6  | 10      | 11      | 6.5     | 59      |
| 79 22 120   | 061427          | 120            | AM 🗾 🚺 🕷               | burnished | polished | with multi-compo-<br>nent grips | 0.1 - 1.3 | 0.8       |          |      | 6.5     | 9       | 6.5     | 56      |
| 79 22 125   | 061342          | 125            | * 🔨 💽 MM               | burnished | polished | with multi-compo-<br>nent grips | 0.1 - 1.7 | 1.0       |          |      | 10      | 11      | 6.5     | 60      |
| 79 32 125   | 061366          | 125            | * <b>* * * * *</b> *   | burnished | polished | with multi-compo-<br>nent grips | 0.2 - 1.5 | 1.1       | 0.6      |      | 11      | 11      | 6.5     | 58      |
| 79 42 125   | 061380          | 125            | AM 🗾 🔭                 | burnished | polished | with multi-compo-<br>nent grips | 0.1 - 1.5 | 0.8       |          |      | 11      | 11      | 6.5     | 58      |
| 79 52 125   | 065135          | 125            | ≉M™≣M≫                 | burnished | polished | with multi-compo-<br>nent grips | 0.2 - 1.3 | 0.9       | 0.5      |      | 11      | 11      | 6.5     | 58      |
| 79 62 125   | 065142          | 125            | * <b>/</b> \\$}M>>     | burnished | polished | with multi-compo-<br>nent grips | 0.1 - 1.3 | 0.8       |          |      | 11      | 11.0    | 6.5     | 58      |

79 22 125

SON.

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### **Precision Electronics Diagonal Cutters ESD DIN ISO 9654** 02 120 ESD Cu/hard max. @ 0,2-1,0/1 79 02 120 ESD NM 🛃 🔽 🛦 🕸 🖊 79 02 125 ESD 79 22 120 ESD NM 🛃 F NM 🛃 📕 🛦 🕸 🚩 🙈 🕸 🚩 79 22 125 ESD 79 32 125 ESD 🛦 🕸 🖊 🚼 MM 🛦 🕸 🚩 T 🕄 MM 79 02 120 ESD / 79 22 120 ESD mini-head 79 02 125 ESD / 79 22 125 ESD round head 79 12 125 ESD specially for cutting through hard wire 79 42 125 ESD and piano wire 🛦 🕸 🖊 🚼 MM

#### ESD pliers (electrostatic discharge) • electrostatic energy is discharged through the handles

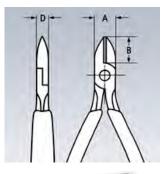
- in a gradual and controlled manner
- which protects components endangered by electrostatic discharge
- in accordance with applicable standards, e.g. IEC TR 61 340-5, DIN EN 61 340-5, SP Method 2472
- precision pliers for ultra fine cutting work, e.g. in electronics and fine mechanics
- very precisely ground and sharp cutting edges with very small bevels for exact cutting on delicate electronic components; also available without bevel for flush cutting
- electrically discharging handles dissipative
- 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
- forged from chrome vanadium ball-bearing steel

### 79 32 125 ESD / 79 42 125 ESD pointed head

**79 62 125 ESD / 79 62 125 ESD** pointed head; with lead catcher - no uncontrolled loss of cut wire ends



¢,



Pliers Sets, see page 197

|               |                 |                |  |           |          |                                 | Cı        | utting ca | pacities |           | Di      | mensic  | ns      |           |
|---------------|-----------------|----------------|--|-----------|----------|---------------------------------|-----------|-----------|----------|-----------|---------|---------|---------|-----------|
| Article No.   | EAN<br>4003773- | <b>↔</b><br>mm |  | Pliers    | Head     | Handles                         | Ø mm      | Ø mm      | Ø mm     | O<br>Ø mm | B<br>mm | A<br>mm | D<br>mm | ے کے<br>g |
| 79 02 120 ESD | 061595          | 120            | A 🕸 🏲 💽 A MA   | burnished | polished | with multi-com-<br>ponent grips | 0.2 - 1.4 | 1.0       | 0.6      |           | 6.5     | 9.0     | 6.5     | 60        |
| 79 02 125 ESD | 061519          | 125            | 🛦 🕸 🏲 🕄 KW   | burnished | polished | with multi-com-<br>ponent grips | 0.2 -1.7  | 1.3       | 0.7      |           | 10      | 11      | 6.5     | 61        |
| 79 12 125 ESD | 071389          | 125            | 🛦 🕸 🏲 🎜 KW   | burnished | polished | with multi-com-<br>ponent grips | 0.3 - 1.7 | 1.3       | 1.0      | 0.6       | 10      | 11      | 6.5     | 61        |
| 79 22 120 ESD | 061618          | 120            | 🛦 🕸 🏲 🎜 KW   | burnished | polished | with multi-com-<br>ponent grips | 0.1 - 1.3 | 0.8       |          |           | 6.5     | 9.0     | 6.5     | 61        |
| 79 22 125 ESD | 061533          | 125            | 🛦 🕸 🏲 🎜 KW   | burnished | polished | with multi-com-<br>ponent grips | 0.1 - 1.7 | 1.0       |          |           | 10      | 11      | 6.5     | 61        |
| 79 32 125 ESD | 061557          | 125            | 🛦 🕸 🏲 📲 KWM  | burnished | polished | with multi-com-<br>ponent grips | 0.2 - 1.5 | 1.1       | 0.6      |           | 10.5    | 11      | 6.5     | 61        |
| 79 42 125 ESD | 061571          | 125            | 🛦 🕸 🏲 🍡 🛣 MM   | burnished | polished | with multi-com-<br>ponent grips | 0.1 - 1.5 | 0.8       |          |           | 10.5    | 11      | 6.5     | 58        |
| 79 52 125 ESD | 065159          | 125            | ▲ * <b>~</b> €3 MM<br>>                                  | burnished | polished | with multi-com-<br>ponent grips | 0.2 - 1.3 | 0.9       | 0.5      |           | 11      | 11      | 6.5     | 58        |
| 79 62 125 ESD | 065166          | 125            | (A) (\$ <b>●</b> (*) (*) (*) (*) (*) (*) (*) (*) (*) (*) | burnished | polished | with multi-com-<br>ponent grips | 0.1 - 1.3 | 0.8       |          |           | 11      | 11      | 6.5     | 58        |



- ideal for tightening and releasing plastic pipe joints, round union nuts, etc. from 25 up to 65 mm dia.
- with serrated gripping jaws
- 4-position adjustable slip joint
- Chrome vanadium electric steel, forged, oil-hardened





#### 81 13 230

with plastic jaws for careful installation up to 60 mm dia.

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |                 | Pliers        | Handles        | Working Capacity<br>Ø mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|----------------|-----------------|---------------|----------------|--------------------------|-----------------------|
| 81 03 230   | 018957          | 230            |                 | chrome plated | plastic coated | 25 - 65                  | 294                   |
| 81 13 230   | 050117          | 230            |                 | chrome plated | plastic coated | 25 - 60                  | 288                   |
|             |                 |                |                 |               |                |                          |                       |
| 81 19 230   | 050124          | 2 pairs        | of plastic jaws | for 81 13 230 |                |                          |                       |



- for very narrow screw connections
- Special tool steel, forged, oil-hardened

84 11 200 straight head

84 21 200 20° angled head

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                | Pliers             | Head     | Handles        | Recess<br>Ø mm | Head thickness<br>mm | ۵ <sup>۲</sup> ۵<br>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                   |

84



# <sup>83</sup> Pipe Wrenches 90°

DIN 5234



83 10 015 <u>√</u>90° 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,

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                 | Pliers            | O]<br>Ø mm | O]<br>Ø Inch | O:<br>Inch | Clamping width<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------|-------------------|------------|--------------|------------|----------------------|---------|
| 83 10 010   | 014188          | 310             |                 |                   | 42         | 1 5/8        | 1          | 42                   | 779     |
| 83 10 015   | 014195          | 420             |                 | red powder-coated | 60         | 2 3/8        | 1 1/2      | 60                   | 1415    |
| 83 10 020   | 014201          | 560             | <u>∡9</u> 0° আ∭ |                   | 70         | 2 3/4        | 2          | 70                   | 2600    |
| 83 10 030   | 022329          | 650             |                 |                   | 110        | 4 3/8        | 3          | 110                  | 3433    |
| 83 10 040   | 022336          | 750             |                 |                   | 130        | 5 1/8        | 4          | 130                  | 4921    |



### Pipe Wrenches 45°

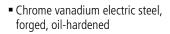
DIN 5234

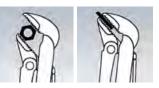


83 20 015 <u>√</u>45° আ



- 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





| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                 | Pliers            | O]<br>Ø mm | O]<br>Ø Inch | )<br>Inch | Clamping width<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------|-------------------|------------|--------------|-----------|----------------------|---------|
| 83 20 010   | 014218          | 320             |                 |                   | 42         | 1 5/8        | 1         | 42                   | 817     |
| 83 20 015   | 014225          | 430             | <u>∡4</u> 5° আ∭ | red powder-coated | 60         | 2 3/8        | 1 1/2     | 60                   | 1408    |
| 83 20 020   | 014232          | 570             |                 | ·                 | 70         | 2 3/4        | 2         | 70                   | 2596    |



### **Pipe Wrenches S-Type**

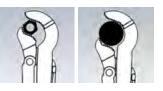
DIN 5234



83 30 015 

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, oil-hardened



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers            | O]<br>Ø mm | O]<br>Ø Inch | ा<br>ch | Clamping width<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-------------------|------------|--------------|---------|----------------------|---------|
| 83 30 005   | 025221          | 245             |                   | 35         | 1 1/2        | 1/2     | 35                   | 472     |
| 83 30 010   | 014249          | 320             |                   | 42         | 1 5/8        | 1       | 42                   | 836     |
| 83 30 015   | 014256          | 420             | red powder-coated | 60         | 2 3/8        | 1 1/2   | 60                   | 1540    |
| 83 30 020   | 014263          | 540             |                   | 70         | 2 3/4        | 2       | 70                   | 2669    |
| 83 30 030   | 014164          | 680             |                   | 120        | 4 3/4        | 3       | 100                  | 4366    |

### Pliers Wrenches (PATENTED)

#### pliers and wrench in a single tool

DIN ISO 5743









86 03 300

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.

- adjustable tool for tightening screws
- also excellent for gripping, holding, pressing and bending workpieces
- replaces a set of spanners, metric and imperial
- smooth jaws for cautious installation of plated fittings
- zero backlash jaw pressure prevents damage to edges of sensitive components
- adjustment at the touch of a button directly on the workpiece
- parallel jaws allow infinitely variable gripping of all widths to the specified maximum size
- reliable catching of the hinge bolt: no unintentional shifting
- the action of the jaws allows 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 150 mm

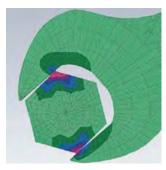
the mini pliers wrench for precision mechanics; ideal multi-purpose wrench in pocket size; indispensable companion in emergency tool kit

#### Length 180 mm

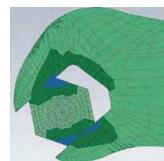
with narrow gripping jaws - for tightening situations that require a slim tool



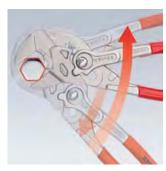
Working on plated fittings without damage of the surface



Conventional open end wrench: edge pressure causes surface damage



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



Working using the ratchet principle



Fast adjustment by pushing a button

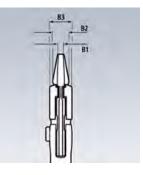
### **PIPE WRENCHES AND WATER PUMP PLIERS**



infinitely variable adjustment of widths across flats for metric and imperial workpieces cam drive increases force to up to 10 times hand power







|             |                 |                  |     |                  |                            |       |    |                         | D        | imensior | IS       |         |
|-------------|-----------------|------------------|-----|------------------|----------------------------|-------|----|-------------------------|----------|----------|----------|---------|
| Article No. | EAN<br>4003773- | <b>←</b> ><br>mm |     | Pliers           | Handles                    | Inch  | mm | Adjustment<br>positions | B1<br>mm | B2<br>mm | B3<br>mm | ۵۵<br>g |
| 86 03 150   | 069676          | 150              |     |                  |                            | 1     | 27 | 14                      | 4.7      | 7.0      | 10.5     | 175     |
| 86 03 180   | 035466          | 180              | QE  | nickel           | plastic coated             | 1 3/8 | 35 | 13                      | 5.0      | 8.0      | 12.0     | 254     |
| 86 03 250   | 033837          | 250              |     | plated           |                            | 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              |     |                  |                            | 1     | 27 | 14                      | 4.7      | 7.0      | 10.5     | 193     |
| 86 05 180   | 047162          | 180              | QEY | nickel<br>plated | with multi-component grips | 1 3/8 | 35 | 13                      | 5.0      | 8.0      | 12.0     | 277     |
| 86 05 250   | 047841          | 250              |     |                  |                            | 1 3/4 | 46 | 17                      | 8.0      | 8.0      | 14.0     | 571     |

(PATENTED)

# **KNIPEX Cobra**<sup>®</sup> Hightech Water Pump Pliers

DIN ISO 8976

87 01 125 IIII









87 01 250



87 01 300











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



Fine adjustment by pushing a button: fast and comfortable



Fast and firm adjustment directly on the workpiece

### PIPE WRENCHES AND WATER PUMP PLIERS





Enormous gripping capacity; 30 % more than conventional pipe wrenches

















| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |  | Pliers               | Head                               | Handles                       | O]<br>Ø Inch | O]<br>Ømm |    | Adjustment<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|----------------|--|----------------------|------------------------------------|-------------------------------|--------------|-----------|----|-------------------------|-----------------------|
| 87 01 125   | 069935          | 125            |  | grey atramentized    | polished                           | with non-slip plastic coating | 1            | 27        | 27 | 13                      | 85                    |
| 87 01 150   | 060116          | 150            |  |                      |                                    |                               | 1 1/4        | 32        | 30 | 11                      | 145                   |
| 87 01 180   | 022015          | 180            |  | grey atramentized g  |                                    | with non-slip plastic coating | 1 1/2        | 42        | 36 | 18                      | 170                   |
| 87 01 250   | 022022          | 250            |  |                      |                                    |                               | 2            | 50        | 46 | 25                      | 314                   |
| 87 01 300   | 034087          | 300            |  | grey atramentized    | polished                           | with non-slip plastic coating | 2 3/4        | 70        | 60 | 30                      | 530                   |
| 87 02 180   | 042396          | 180            |  |                      | polished with multi-component grip |                               | 1 1/2        | 42        | 36 | 18                      | 196                   |
| 87 02 250   | 040316          | 250            |  | grey atramentized    |                                    | with multi-component grips    | 2            | 50        | 46 | 25                      | 376                   |
| 87 02 300   | 029144          | 300            |  |                      |                                    |                               | 2 3/4        | 70        | 60 | 30                      | 580                   |
| 87 03 125   | 073949          | 125            |  |                      |                                    |                               | 1            | 25        | 27 | 13                      | 85                    |
| 87 03 180   | 005667          | 180            |  | chromo platod        |                                    | with non-clin plactic coating | 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            |  | □□ 「二」 chrome plated |                                    | with multi component grips    | 2            | 50        | 46 | 25                      | 376                   |
| 87 05 300   | 014126          | 300            |  |                      |                                    | with multi-component grips    |              | 70        | 60 | 30                      | 579                   |



# <sup>87</sup> KNIPEX Cobra<sup>®</sup> XL/XXL PATENTED

#### Pipe Wrenches and Water Pump Pliers

DIN ISO 5743



Both the KNIPEX Cobra<sup>®</sup> 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<sup>®</sup> 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<sup>®</sup> 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".



87 01 560





Fine adjustment by pushing a button: fast and comfortable

- greater gripping capacity but much lower weight than comparable pipe wrenches
- 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 hand force required
- gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- box-joint design: high stability because of double guide
- guard prevents operators' fingers being pinched
- Chrome vanadium electric steel, forged, oil-hardened

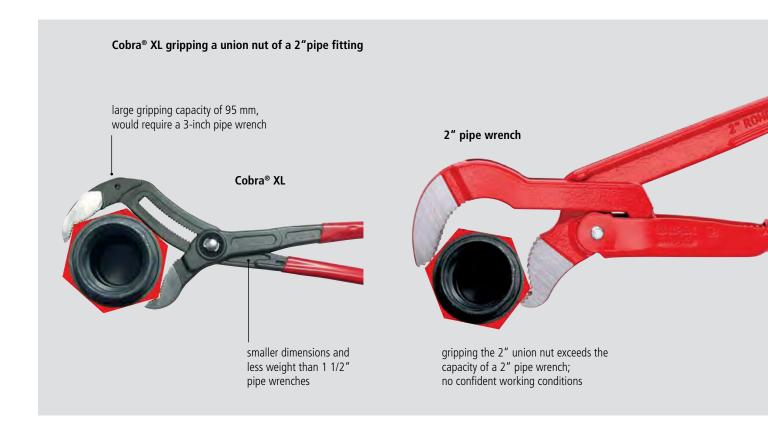


Self-locking on pipes and nuts. No slipping on the workpiece and less hand force required.



Fast and firm adjustment directly on the workpiece.

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers            | Head     | Handles        | O]<br>Ø Inch |     |     | Adjustment<br>positions | ۵ <sup>۲</sup> ۵<br>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 SmartGrip<sup>®</sup> (PATENTED)

#### Water Pump Pliers with automatic adjustment

DIN ISO 8976



85 01 250



Automatic adjustment: no time-consuming trial and error-adjusting to find the correct opening size in case of differently sized workpieces (e.g. the red highlighted nuts and fittings). Everything done with a single grasp.



Slim dimensions for good access to the workpiece using one-hand operation

Adjustment to suit the workpiece is automatic with the KNIPEX SmartGrip<sup>®</sup>! Place the outer jaw on the workpiece, squeeze the handles - turn!

- 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 hand force required
- gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- box-joint design: high stability because of double guide
- guard prevents operators' fingers being pinched
- Iocking lever for space saving transport with reliable closed handles
- Chrome vanadium electric steel, forged, oil-hardened





Locking lever for space saving transport with reliable closed handles



Self-locking on pipes and nuts: no slipping on the workpiece

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |    | Pliers            | Head     | Handles                       | O]<br>Ø Inch | O]<br>Ø mm |    | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|----|-------------------|----------|-------------------------------|--------------|------------|----|-----------------------|
| 85 01 250   | 061304          | 250             | T. | grey atramentized | polished | with non-slip plastic coating | 1 1/4        | 32         | 36 | 370                   |





# Multiple Slip Joint Spanner (PATENTED)

DIN ISO 5743



The KNIPEX 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.

- 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 in the range from 17 mm on: 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 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, oil-hardened





In operation on rusted nut with rounded edges



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



Fine adjustment by pushing a button: fast and comfortable



Multiple Slip Joint Spanner as the second spanner for tightening locknuts

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers            | Head     | Handles                       | Inch        |         | Adjustment<br>positions | ۲۵<br>g |  |
|-------------|-----------------|-----------------|-------------------|----------|-------------------------------|-------------|---------|-------------------------|---------|--|
| 87 41 250   | 054566          | 250             | grey atramentized | polished | with non-slip plastic coating | 3/8 - 1 1/4 | 10 - 32 | 15                      | 328     |  |

#### <sup>87</sup>5 KNIPEX Cobra<sup>®</sup> ES (PATENTED)

Water Pump Pliers extra-slim

**DIN ISO 8976** 



87 51 250  Due to the increasing compactness of components and machines the workspace becomes more confined. However, the requirements on the gripping force and capacity of the tools do not decrease on the other hand. KNIPEX-"Cobra" ES allows powerful gripping in confined areas.

- ideal for service, maintenance and equipment repair, in automotive and general industry
- Iong, 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 hand force required
- box-joint design: high stability because of double guide
- reliable catching of the hinge bolt: no unintentional shifting

End.

- favourable lever action: optimum transmission of force
- guard prevents operators' fingers being pinched
- Chrome vanadium electric steel, forged, oil-hardened



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



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



Fine adjustment by pushing a button: fast and comfortable



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

| - | Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers               | Head     | Handles                          | O]<br>Ø Inch | O]<br>Ømm |    | max.<br>parallel<br>opening<br>width | max.<br>gripping<br>depth | Adjustment<br>positions | ۵'۵<br>g |
|---|-------------|-----------------|-----------------|----------------------|----------|----------------------------------|--------------|-----------|----|--------------------------------------|---------------------------|-------------------------|----------|
|   | 87 51 250   | 061267          | 250             | grey<br>atramentized | polished | with non-slip<br>plastic coating | 1 1/4        | 32        | 34 | 37.0                                 | 42.0                      | 19                      | 328      |

#### 88

### KNIPEX Alligator<sup>®</sup> Water Pump Pliers

DIN ISO 8976



 self-locking on pipes and nuts: no slipping on the workpiece and low hand force required

- gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- box-joint design: high stability because of double guide
- robust construction, insensitive to dirt; particularly suitable for outdoor work
- guard prevents operators' fingers being pinched
- Chrome vanadium electric steel, forged, oil-hardened

#### Length 250 / 300 mm

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; the complete actuating force can be used to turn the workpieces; not having to squeeze the pliers handles reduces the required effort



â1000V @€ আ∭ ⊡



â1000V @€ আ∭ ⊡









88 07 250

88 07 300

£ 1000 V 🖄 🗲

chrome plated



2 3/4

with dipped insulation,

VDE-tested

## 89 Water Pump Pliers with tongue and groove joint

DIN ISO 8976



- 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 for stable grip
- Chrome vanadium electric steel, forged, oil-hardened

#### Length 250 mm

self-locking on pipes and nuts: no slipping on the workpiece and low hand force required

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers               | Head      | Handles                    | O]<br>Ø Inch | O]<br>Ømm |    | ۲<br>ع |
|-------------|-----------------|-----------------|----------------------|-----------|----------------------------|--------------|-----------|----|--------|
| 89 01 200   | 013327          | 200             | black atramentized   | polished  | plastic coated             | 1 1/4        | 32        | 30 | 231    |
| 89 01 250   | 013334          | 250             | DIACK ALIAIMEIILIZEU | polisileu |                            | 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**

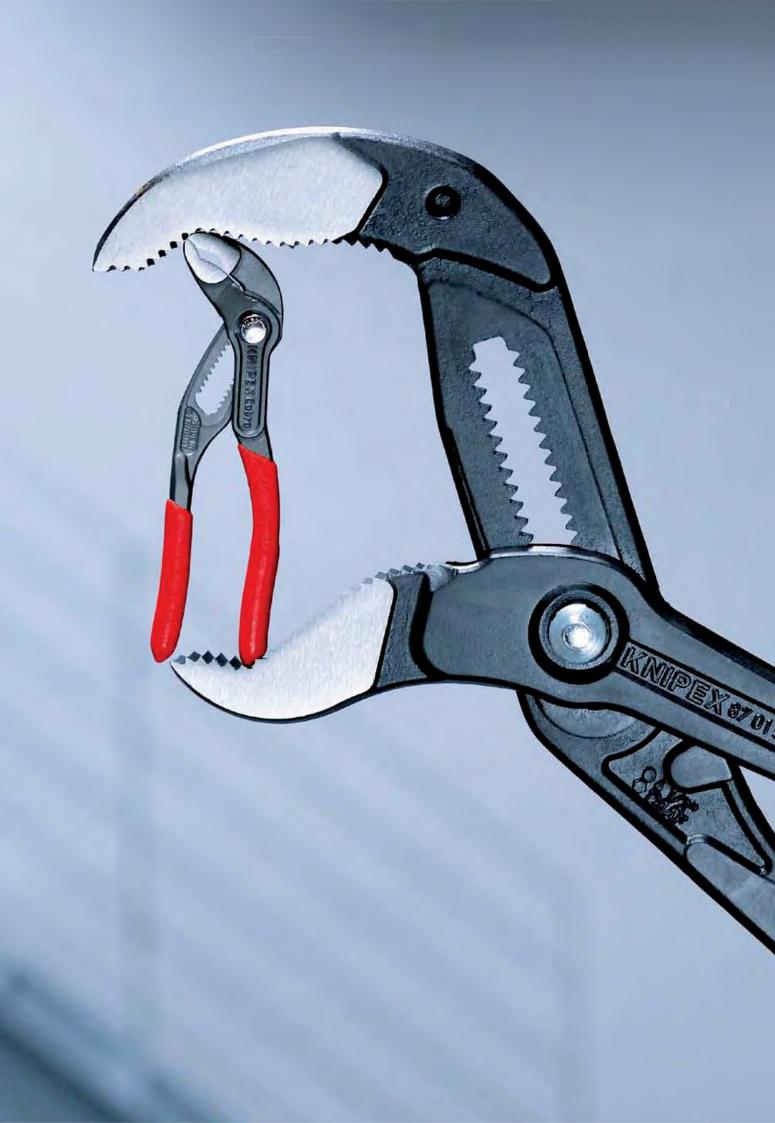
with tongue and groove joint DIN ISO 8976

- 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



<sup>90 03 125</sup> 

| Article No. | EAN<br>4003773- | <b>∢-→</b><br>mm | Pliers             | Head     | Handles        | O]<br>Ø Inch | O]<br>Ø mm | ⊖<br>mm | ۵ <sup>۲</sup> ۵<br>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                   |



#### **90** 20

### Pipe Cutter for plastic conduit pipes and hoses



MM .



 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 lever
- Tool body: plastic, fibreglass-reinforced
- Blades: special tool steel, oil-hardened, interchangeable



with replaceable blade





- for cutting composite pipes with diameters from 12.0 to 20.0 mm
   and for cutting flexible protective tubes with a diameter of 18.0.
  - and for cutting flexible protective tubes with a diameter of 18.0 35.0 mm without damaging a potenially pipe inside
    a calibration arbor can be fitted, for example for Geberit composite
  - pipes with 11.5 and 15.0 mm dia.
  - Tool body: high-grade chrome vanadium electric steel, oil-hardened
  - Blades: special tool steel, oil-hardened, interchangeable





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<br>4003773- | <b>←→</b><br>mm |                 | Tool   | Handles                    | Cutting cap<br>Composite pipes<br>Ø mm | pacities<br>Protective tubes<br>Ø mm | Blade length<br>mm | ۲۵<br>g |  |  |
|-------------|-----------------|-----------------|-----------------|--|----------------------------|--|--------------------------------------|--------------------|---------|--|--|
| 90 25 20    | 046004          | 210             | MM              | galvanized                                   | with multi-component grips | 12 - 25                                | 18 - 35                              | 25                 | 332     |  |  |
|             |                 |                 |                 |  |                            |  |                                      |                    |         |  |  |
| 90 29 01    | 031932          | Spare           | blade for 90 25 |  |                            |  |                                      |                    |         |  |  |
| 90 29 02    | 031949          | 1 pair          | of spare blades | spare blades for 90 25 20 (protective pipes) |                            |  |                                      |                    |         |  |  |

Calibration arbor for 90 25 20 (Geberit pipes)

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm           |    | Cutting capacities<br>Ø mm | ۲۵<br>g |  |  |  |
|-------------|-----------------|---------------------------|----|----------------------------|---------|--|--|--|
| 90 20 185   | 067122          | 185                       | MM | 25                         | 172     |  |  |  |
|             |                 |                           |    |                            |         |  |  |  |
| 90 29 185   | 067139          | Spare blade for 90 20 185 |    |                            |         |  |  |  |

#### <sup>90</sup> <sup>25</sup> Pipe Cutter

for composite pipes and protective tubes

PATENTED



90 25 20 MM

90 29 15

031956

### **90** 25

## Pipe Cutter for composite and plastic pipes

(PATENTED)



- for cutting thick walled plastic and composite pipes with diameters from 26.0 to 40.0 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 those

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                    | Tool       | Handles                    | Cutting capacities<br>Ø mm | Cutting edge length<br>mm | ۲۵<br>g |  |  |
|-------------|-----------------|-----------------|--------------------|------------|----------------------------|----------------------------|---------------------------|---------|--|--|
| 90 25 40    | 045182          | 210             | MM                 | galvanized | with multi-component grips | 26 - 40                    | 40                        | 500     |  |  |
|             |                 |                 |                    |            |                            |                            |                           |         |  |  |
| 90 29 40    | 045199          | Spare I         | olade for 90 25 40 |            |                            |                            |                           |         |  |  |

## Punch Lock Riveters

- to join metal section sheets used in dry walling with a lock seam
- for U- and C-shaped sections with max 1.2 mm metal (2 x 0.6 mm)
- minimum handforce required due to optimum lever transmission
- Pliers body: special tool steel, rolled, oil-hardened



90 42 340

90 42 250 for one-hand operation



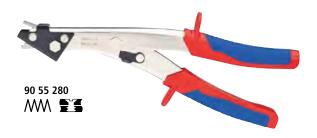
Setting the pliers for connection of two metal section sheets



The punching tool is squeezed through the metal section sheets

| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |                 | Pliers                         | Handles                    | Capacity           | ۲<br>g |  |  |  |  |
|-------------|-----------------|------------------|-----------------|--------------------------------|----------------------------|--------------------|--------|--|--|--|--|
| 90 42 250   | 047865          | 250              | MM              | burnished                      | with multi-component grips | max. 1,2 (2 x 0,6) | 676    |  |  |  |  |
| 90 42 340   | 071884          |                  |                 | burnished                      | with multi-component grips | max. 1,2 (2 x 0,6) | 901    |  |  |  |  |
|             |                 |                  |                 |                                |                            |                    |        |  |  |  |  |
| 90 49 340   | 028079          | Spare            | punch for 90 4  | :h for 90 41 340 and 90 42 340 |                            |                    |        |  |  |  |  |
| 90 49 340 M | 028499          | Spare (          | die for 90 41 3 | 90 41 340 and 90 42 340        |                            |                    |        |  |  |  |  |

## 55 Sheet Metal Nibbler



- 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





Notching and chip breaking in a single pass

Notching without chip breaking

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Tool          | Handles                    | ۲<br>ع |  |  |  |  |
|-------------|-----------------|-----------------|---------------------|---------------|----------------------------|--------|--|--|--|--|
| 90 55 280   | 026730          | 280             |                     | nickel plated | with multi-component grips | 461    |  |  |  |  |
|             |                 |                 |                     |               |                            |        |  |  |  |  |
| 90 59 280   | 027355          | Spare I         | blade for 90 55 280 |               |                            |        |  |  |  |  |

## 90 61 Notching Pliers (PATENTED)



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.

- special pliers for notching recesses into plastic ledges and plastic casings for electric and sanitary installation
- notches can be enlarged by initial and final cut
- 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



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |    | Pliers    | Handles            | Capacity   | ۵'۵<br>g |
|-------------|-----------------|-----------------|----|-----------|--------------------|------------|----------|
| 90 61 16    | 051947          | 250             |    | humiched  | with plactic grips | 16 x 32 mm | 403      |
| 90 61 20    | 051954          | 250             | MM | burnished | with plastic grips | 20 x 29 mm | 414      |

## <sup>90</sup> Revolving Punch Pliers



- to punch holes into leather, textiles and plastic materialwith six interchangeable punches:
- 2.0 / 2.5 / 3.0 / 3.5 / 4.0 / 5.0 mm dia.
- with opening spring and locking lever
- powder-coated for reliable protection against rust
- Pliers body and punches: special tool steel, oil-hardened



Interchangeable punches

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |    | Pliers            | Finish        | ۲٦<br>g |  |
|-------------|-----------------|-----------------|----|-------------------|---------------|---------|--|
| 90 70 220   | 019411          | 220             | MM | red powder-coated | powder coated | 251     |  |

## <sup>91</sup> Tile Nibbling Pincer (parrot beak pincer)

- enlarges holes in tiles and forms tile edges
- Special tool steel, forged, oil-hardened

• for breaking tiles to a scored line

- Special tool steel, forged, oil-hardened

• moveable, self-aligning jaw, rubberlined to protect the tile



91 00 200

| A | rticle No. | EAN<br>4003773- | <b>←→</b><br>mm | Pliers             | Head     | ۲۵<br>g |
|---|------------|-----------------|-----------------|--------------------|----------|---------|
| 9 | 1 00 200   | 013754          | 200             | black atramentized | polished | 158     |



91 11 190

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers          | Handles        | ۵'۵<br>g |
|-------------|-----------------|-----------------|-----------------|----------------|----------|
| 91 11 190   | 042310          | 190             | black lacquered | plastic coated | 317      |



| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm | Pliers             | Head     | Handles        | Jaw width<br>mm | ۵'ک<br>g |
|-------------|-----------------|------------------|--------------------|----------|----------------|-----------------|----------|
| 91 31 180   | 069744          | 180              | black atramentized | polished | plastic coated | 24,0            | 245      |



### **Glass Nibbling Pincers**

<sup>91</sup> Glass Breaking Pincer

DIN ISO 5743

DIN ISO 5743



- 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

for breaking glass to a scored lineSpecial tool steel, forged, oil-hardened

#### 91 71 160

narrow version, with opening spring

| Article |     | EAN<br>4003773- | <b>↔</b><br>mm |     | Pliers             | Head     | Handles        | Jaw width<br>mm | ۲۵<br>g |
|---------|-----|-----------------|----------------|-----|--------------------|----------|----------------|-----------------|---------|
| 91 51   | 160 | 014355          | 160            |     | black atramentized | polished | plastic coated | 9,5             | 148     |
| 91 71   | 160 | 019565          | 160            | m W | black atramentized | polished | plastic coated | 4,0             | 141     |

## <sup>91</sup><sub>6</sub> 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



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Pliers             | Head     | Handles        | Jaw width<br>mm | ۵'۵<br>g |
|-------------|-----------------|-----------------|--------------------|----------|----------------|-----------------|----------|
| 91 61 160   | 019527          | 160             | black atramentized | polished | plastic coated | 9,5             | 141      |

#### 92 **Precision Tweezers**

92 02 53 x x45° ⊂

92 02 54

& ∡45° ⊂

#### smooth gripping surfaces non-reflective matt finished

92 12 52

& <u>⊀</u>85° ⊂

#### 92 02 53

for SMD-technology\*; angled tips, width approx. 1 mm; gripping surfaces matt finished 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; gripping jaws 3.5 mm wide, integrated profile for reliable gripping of cylindrical components of 0.6 mm dia.; gripping surfaces matt finished 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

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Finish                               | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|---------------------|--------------------------------------|-----------------------|
| 92 02 53    | 054603          | 120             | 8\$8 <u>∡4</u> 5° ⊂ | stainless, anti-magnetic             | 16                    |
| 92 02 54    | 054610          | 120             | & <u>x45°</u> ⊂     | stainless, anti-magnetic             | 15                    |
| 92 02 55    | 054627          | 115             |                     | stainless, anti-magnetic, acid-proof | 16                    |
| 92 12 52    | 054658          | 120             | ×\$85° ⊂            | stainless, anti-magnetic             | 20                    |

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

92 02 55

88 -

#### 92 Precision Tweezers pointed shape



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |   | Finish   | ے<br>م |  |
|-------------|-----------------|-----------------|---|--|--------|--|
| 92 22 04    | 054665          | 130             | * | stainless, anti-magnetic                       | 20     |  |
| 92 22 06    | 054672          | 120             | * | stainless, anti-magnetic                       | 15     |  |
| 92 22 07    | 054689          | 115             | * | stainless, anti-magnetic, acid-proof           | 12     |  |
| 92 23 05    | 054726          | 120             | * | Titanium, anti-magnetic, acid-proof, stainless | 10     |  |
| 92 24 01    | 054733          | 120             | * | nickel plated                                  | 15     |  |

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

#### 92 22 04

non-reflective matt finished; gripping surfaces matt finished for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

#### 92 22 06

non-reflective matt finished; gripping surfaces matt finished for optimum grip; Chrome nickel steel: stainless, anti-magnetic (18/10), very popular electronics quality

#### 92 22 07

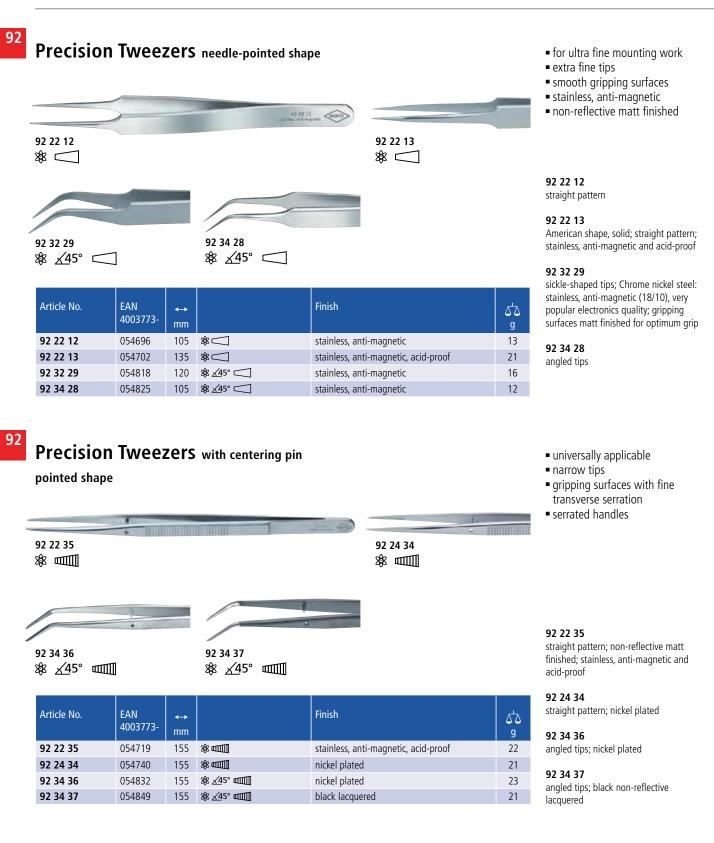
non-reflective matt finished; stainless, anti-magnetic and acid-proof

#### 92 23 05

Titanium; electrically conductive; lightweight; non-reflective matt finished; stainless, anti-magnetic and acid-proof

#### 92 24 01

mirror finish nickel plated and polished



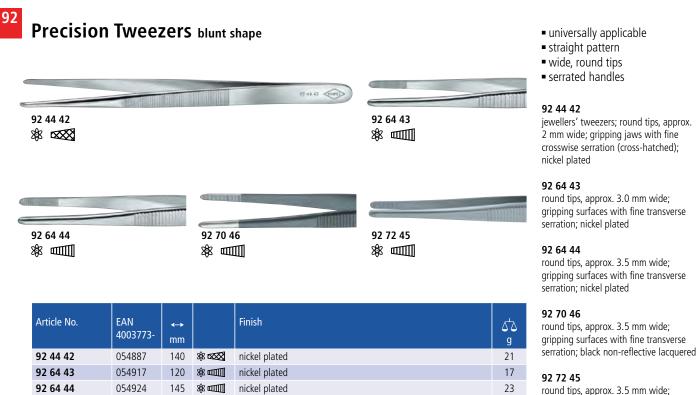
#### 92

### Precision Tweezers round slim shape

- round tips, approx. 2 mm wide
- smooth gripping surfaces
- stainless, anti-magnetic and acid-proof
- Chrome nickel steel, stainless, non-magnetic, acid-proof

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |   | Finish                                  | ۲۵<br>g |
|-------------|-----------------|-----------------|---|---|---------|
| 92 52 23    | 054894          | 120             | * | stainless, anti-magnetic,<br>acid-proof | 17      |

92 52 23 🕸 🥅



| $\land$     |
|-------------|
|             |
| 1           |
| 7           |
| 3           |
| 5           |
| 7           |
| 1<br>7<br>3 |

| ] | stainless, anti-magnetic, acid-proof |
|---|--------------------------------------|
|   |                                      |
|   |                                      |
|   |                                      |
|   |                                      |

## **Plastic Tweezers**

9

9

| <ul> <li>trapezoidal</li> </ul> | tips, | approx. | 3.5 | mm | wide |
|---------------------------------|-------|---------|-----|----|------|
|                                 |       |         |     |    |      |

- serrated gripping surfaces
- serrated handles
- Tweezers body: solid plastic, temperature-resistant up to 130°C

92 72 45

round tips, approx. 3.5 mm wide;

serrated gripping surfaces; nonreflective matt finished; stainless,

anti-magnetic and acid-proof



### 92

### Precision Tweezers rectangular blunt

|  | CERES EL M.C. |
|--|---------------|
| 92 84 18                                 |               |
| × 10 10 10 10 10 10 10 10 10 10 10 10 10 |               |

- mounting tweezers
- rectangular tips, approx. 0.9 mm wide
- gripping surfaces with fine transverse serration
- nickel plated
- Spring steel, high-strength

| Article N | lo. | EAN<br>4003773- | <b>∢→</b><br>mm |       | Finish        | ۲۵<br>g |
|-----------|-----|-----------------|-----------------|-------|---------------|---------|
| 92 84 1   | 8   | 054986          | 125             | × 100 | nickel plated | 19      |



 for holding small parts without finger pressure for efficient clamping

- nickel plated
- Spring steel, high-strength

#### 92 94 91

trapezoidal tips; straight pattern; gripping surfaces with fine transverse serration; serrated handles

#### 92 95 89

narrow tips; straight pattern; gripping surfaces with fine transverse serration; handles with plastic attachement

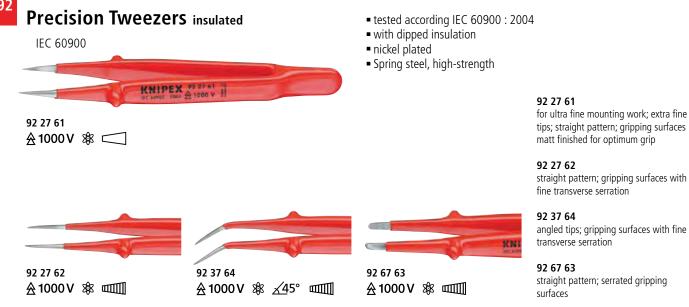
#### 92 95 90

narrow tips; angled tips; gripping surfaces with fine transverse serration; handles with plastic attachement

| Article |      | EAN<br>4003773- | <b>←→</b><br>mm |                      | Finish        | ۲۵<br>g |
|---------|------|-----------------|-----------------|----------------------|---------------|---------|
| 92 94   | 4 91 | 055006          | 160             | *                    | nickel plated | 35      |
| 92 95   | 5 89 | 055013          | 160             | × 1                  | nickel plated | 30      |
| 92 95   | 5 90 | 055020          | 160             | \$\$ <u>∡</u> 45° আ∭ | nickel plated | 32      |

#### 92

\$ <u>¥</u>45° Ⅲ



| A | Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                 | Finish                 | ۲۵<br>g |
|---|-------------|-----------------|-----------------|-----------------|------------------------|---------|
| 9 | 2 27 61     | 054757          | 130             | <b>≙1000V</b> ⊂ | with dipped insulation | 32      |
| 9 | 2 27 62     | 054764          | 150             | ≙1000V  আ∭      | with dipped insulation | 35      |
| 9 | 2 37 64     | 054856          | 150             | <u> </u>        | with dipped insulation | 34      |
| 9 | 2 67 63     | 054931          | 145             | 会1000V翁ⅢⅢ       | with dipped insulation | 43      |

9

| )2 | Precision Tweezers             | S ESD                       | <ul> <li>Chrome nickel s<br/>very popular ele</li> <li>ESD coating: no<br/>approx. 10<sup>5</sup> Ohr</li> <li>tips non-reflectiv</li> <li>gripping surface</li> <li>Chrome nickel s</li> </ul>                                   |
|----|--------------------------------|-----------------------------|---|
| U  | 92 08 79 ESD<br>🕸 🛕 🦳          | 92 28 69 ESD<br>8           |   |
|    | 92 28 70 ESD<br><sup>(1)</sup> | 92 28 71 ESD<br>8 🔊         | 92 08 78 ESD<br>for SMD-technology <sup>3</sup><br>smooth gripping surf<br>92 08 79 ESD<br>shaped to grip horize<br>components of 1.0 m<br>gripping surfaces; see   |
|    | 92 28 72 ESD<br>🕸 🔔            | 92 38 75 ESD<br>❀ 🔬 🔏 45° 🦳 | <ul> <li>92 28 69 ESD<br/>straight pattern; stroi<br/>gripping surfaces</li> <li>92 28 70 ESD<br/>straight pattern; fine<br/>gripping surfaces</li> <li>92 28 71 ESD<br/>needle-pointed tips;<br/>smooth gripping surf</li> </ul> |
|    | 92 58 74 ESD<br>🕸 🔝            | 92 78 77 ESD<br>8           | 92 28 72 ESD<br>American shape, soli<br>straight pattern; smo<br>surfaces<br>92 38 75 ESD<br>sickle-shaped tips; sr<br>surfaces   |
|    | 92 88 73 ESD<br>🕸 🛕 🎟          |                             |   |

- steel: stainless, anti-magnetic (18/10), lectronics quality
- on-reflective black, with a surface resistance of nm
- tive brushed
- ces matt finished for optimum grip
- steel, stainless, anti-magnetic

#### /\*; angled tips; rfaces

zontal cylindrical mm dia.; smooth errated handles

rong tip; smooth

ne tip; smooth

straight pattern; rfaces

lid; long tips; nooth gripping

smooth gripping

#### 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

| Article No.  | EAN<br>4003773- | <b>∢→</b><br>mm |           | Finish   | ۲۵<br>g |
|--------------|-----------------|-----------------|-----------|--|---------|
| 92 08 78 ESD | 054634          | 120             | 🕸 🛕 🔏 🖘 🖂 | stainless, anti-magnetic, electrically dissipative | 16      |
| 92 08 79 ESD | 054641          | 120             | 🕸 🛕 🥽     | stainless, anti-magnetic, electrically dissipative | 16      |
| 92 28 69 ESD | 054771          | 130             | 🕸 🛦 🥽     | stainless, anti-magnetic, electrically dissipative | 20      |
| 92 28 70 ESD | 054788          | 110             | 🕸 🛕 🥽     | stainless, anti-magnetic, electrically dissipative | 13      |
| 92 28 71 ESD | 054795          | 110             | 🕸 🛦 🤇     | stainless, anti-magnetic, electrically dissipative | 14      |
| 92 28 72 ESD | 054801          | 135             | 🕸 🛦 🤇     | stainless, anti-magnetic, electrically dissipative | 22      |
| 92 38 75 ESD | 054863          | 120             | 🕸 🛕 🔏 🗂   | stainless, anti-magnetic, electrically dissipative | 17      |
| 92 58 74 ESD | 054900          | 120             | 🕸 🛦 🤇     | stainless, anti-magnetic, electrically dissipative | 19      |
| 92 78 77 ESD | 054979          | 145             | 🕸 🛦 🎟     | stainless, anti-magnetic, electrically dissipative | 27      |
| 92 88 73 ESD | 054993          | 130             | 🕸 🛕 🎟     | stainless, anti-magnetic, electrically dissipative | 20      |

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



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

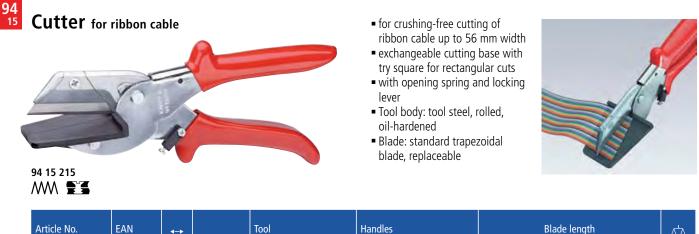


- for clean cutting of plastic pipes (e.g. plastic conduit pipes) with 6 - 35 mm dia.
- not suitable for cutting cables
- blade is replaceable and can be retracted from any position
- low force requirement due to special blade geometry and optimum transmission
- minimum operator fatigue due to ergonomic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

 Blade: special tool steel, oil-hardened



| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm |                 | Body                                   | Capacity<br>Ø mm | Cutting edge length<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|------------------|-----------------|--|------------------|---------------------------|-----------------------|
| 94 10 185   | 047025          | 185              | MM              | die-cast aluminium body, red lacquered | 6.0 - 35.0       | 35                        | 583                   |
|             |                 |                  |                 |  |                  |                           |                       |
| 94 19 185   | 047032          | Spare            | blade for 94 10 | 185                                    |                  |                           |                       |



| Article No.  | EAN<br>4003773- | <b>∢-</b> ►<br>mm |       | Tool          | Handles            | Blade length<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|--|-----------------|-------------------|-------|---------------|--------------------|--------------------|-----------------------|
| 94 15 215  | 046011          | 215               | AM SI | chrome plated | with plastic grips | 56                 | 346                   |
| <b>94 19 215</b> 046219 Set with 10 spare blades for 94 15 215 / 94 35 215 |                 |                   |       |               |                    |                    |                       |



# 94 3 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 try square angle for 45°-cuts and markings for 60°-, 75°-, and 90°-cuts
- with opening spring and locking lever
- Tool body: special tool steel, rolled, oil-hardened
- Blade: standard trapezoidal blade, replaceable

| 94 35 | 215 |
|-------|-----|
| MM    |     |

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Tool          | Handles            | Blade length<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|---------------|--------------------|--------------------|-----------------------|
| 94 35 215   | 046028          | 215             | chrome plated | with plastic grips | 56                 | 397                   |



### Vinyl Shears also for cable ducts

#### (PATENTED)



95 02 10 MM



MM

#### 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 10

for plastic material up to approx. 6.0 mm thickness (e.g. PE with up to 63 Shore)

#### 95 02 21

for cutting and shortening cable ducts, also for plastic material up to 4.0 mm thickness



95 02 10: powerful cutting of plastics up to 6.0 mm in thickness



95 02 21: blade length 110 mm for cutting wide cable ducts

| Artic | le No. | EAN<br>4003773- | <b>←→</b><br>mm |    | Tool      | Handles                    | Cutting capacities<br>mm | Blade length<br>mm | ۲۵<br>g |
|-------|--------|-----------------|-----------------|----|-----------|----------------------------|--------------------------|--------------------|---------|
| 95 0  | 2 10   | 047872          | 225             | MM | burnished | with multi-component grips | 4.0 - 6.0                | 60                 | 459     |
| 95 0  | 2 21   | 052128          | 275             | MM | burnished | with multi-component grips | max. 4.0                 | 110                | 665     |



## 95 3 Shears for KEVLAR<sup>®</sup> fibres



- only for cutting fibres of KEVLAR<sup>®</sup> in optical fibre cables, not recommended for other materials
- precisely ground blades with serration prevent the fibres from slipping and guarantee a clean cut
- riveted precision joint, for low-friction movement and smooth and even cutting of the thin KEVLAR® fibres
- hard-chrome plated, ground surface
- Shears body: chrome vanadium electric steel, oil-hardened
- User-friendly handles: plastic, impact-proof



| Article No.  | EAN<br>4003773- | <b>∢→</b><br>mm | Shears        | Handles        | ۲۵<br>g |
|--------------|-----------------|-----------------|---------------|----------------|---------|
| 95 03 160 SB | 043362          | 160             | chrome plated | plastic coated | 85      |

## <sup>95</sup> 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 lever
- 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



| Article No. | EAN<br>4003773- | <b>∢-</b> ►<br>mm |                            | Head     | Handles        | ۲٦<br>g |  |
|-------------|-----------------|-------------------|----------------------------|----------|----------------|---------|--|
| 95 05 140   | 019589          | 140               |                            | polished | plastic coated | 67      |  |
| 95 05 185   | 060277          | 185               | <u>∡4</u> 0° <b>£</b> ∰ MM | polished | plastic coated | 115     |  |
| 95 05 190   | 019602          | 190               |                            | polished | plastic coated | 116     |  |

### **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 lever; blades made of stainless steel; oil-hardened and tempered

#### 95 06 230

for copper single conductors up to 16 mm<sup>2</sup>, multiple stranded wires up to 50 mm<sup>2</sup>, fine stranded up to 70 mm<sup>2</sup> and aluminium conductors multiple stranded wires up to 70 mm<sup>2</sup>; easy cutting with one-hand operation due to high transmission ratio; stainless – special grade – steel, oil-hardened and tempered

#### 95 06 230

#### â1000 V 🖄 🔂 🚼

|             |           |          |            |                    |          |                               | Cutting c | apacities |     |     |
|-------------|-----------|----------|------------|--------------------|----------|-------------------------------|-----------|-----------|-----|-----|
| Article No. |           | EAN      | <b>∢</b> → |                    | Head     | Handles                       | <b>3</b>  |           | AWG | 5   |
|             |           | 4003773- | mm         |                    |          |                               | Ø mm      | mm²       |     | g   |
|             | 95 05 165 | 019596   | 165        |                    | polished | plastic coated                | 10        | 24        | 3   | 111 |
|             | 95 06 230 | 006305   | 230        | £ 1000 V 🖄 🚭 😂 🖺 🖫 | polished | plastic insulated, VDE-tested | 16        | 50        | 1/0 | 274 |



## 95 Cable Shears



- 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



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



Cut performed with a Cable Shears: easy, clean cut without any deformation of the cable





| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                      | Style | Tool             | Handles  | Cutting<br>Cutting<br>Ø mm | g capacities<br>mm <sup>2</sup> | AWG | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|----------------------|-------|------------------|--|----------------------------|---------------------------------|-----|-----------------------|
| 95 11 165   | 040323          | 165             | <b>* 11</b>          | 1     | burnished        | plastic coated                                   | 15                         | 50                              | 1/0 | 215                   |
| 95 12 165   | 029182          | 165             | <b>*</b> II          | 1     | burnished        | with multi-component grips                       | 15                         | 50                              | 1/0 | 250                   |
| 95 16 165   | 039648          | 165             | 1000 V 🏝 🖨 🔁 🖺 🕄     | 1     | chrome<br>plated | insulated with multi-component grips, VDE-tested | 15                         | 50                              | 1/0 | 262                   |
| 95 21 165   | 069805          | 165             | ⊕ <b>™</b>           | 2     | burnished        | plastic coated                                   | 15                         | 50                              | 1/0 | 215                   |
| 95 22 165   | 069812          | 165             | & <b>II</b> MM       | 2     | burnished        | with multi-component grips                       | 15                         | 50                              | 1/0 | 254                   |
| 95 26 165   | 069980          | 165             | ☆ 1000 V 🖄 🖨 🔂 🝧 KWK | 2     | chrome<br>plated | insulated with multi-component grips, VDE-tested | 15                         | 50                              | 1/0 | 275                   |



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                    | Tool          | Handles   | Cutting c | apacities<br>mm <sup>2</sup> | AWG | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------------|---------------|---|-----------|------------------------------|-----|---------|
| 95 11 200   | 043928          | 200             | <b>0 13</b>        | 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             | £ 1000 V 🕸 🖨 🔁 🖺 🖫 | chrome plated | insulated with multi-component grips,<br>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     |



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

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |   | Head      | Handles                            | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | AWG | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|---|-----------|------------------------------------|-------------------|------------------------------|-----|-----------------------|
| 95 12 500   | 069966          | 500             | • | burnished | with multi-component grips         | 27                | 150                          | 5/0 | 1090                  |
| 95 17 500   | 026785          | 500             | 🛧 1000 V 🖄 🚭 😂 🖺 🖫                      | polished  | with dipped insulation, VDE-tested | 27                | 150                          | 5/0 | 1477                  |



### **Cable Shears**



95 21 600

- for cutting copper and aluminium 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 transmission ratio due to double lever
- guard prevents operators' fingers being pinched
- adjustable bolted joint
- bolted cutter head, replaceable
- Blade head: high-grade chrome vanadium electric steel, forged, oil-hardened
- Handles: steel tube

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |   | Head     |                                    |    | apacities<br>mm <sup>2</sup> | AWG | ۵'۵<br>g |  |
|-------------|-----------------|-----------------|---|----------|------------------------------------|----|------------------------------|-----|----------|--|
| 95 21 600   | 025252          | 600             |   | polished | with plastic grips                 | 27 | 150                          | 5/0 | 1836     |  |
| 95 27 600   | 021797          | 600             | 🛧 1000 V 🖄 😭 🔂 🖺 🕤                          | polished | with dipped insulation, VDE-tested | 27 | 150                          | 5/0 | 2301     |  |
|             |                 |                 |   |          |                                    |    |                              |     |          |  |
| 95 29 600   | 021803          | Spare           | Spare cutter head for 95 21 600 / 95 27 600 |          |                                    |    |                              |     |          |  |

# 95 3 Cable Cutters (ratchet action)

(PATENTED)



95 31 250 3 MM 5



95 31 280 3 MM 3



95 36 250 **≙1000V ▲€ & MM ₽5** 

- 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

#### 95 31 / 36 280

suitable for aluminium sector cable up to 4 x 150 mm<sup>2</sup>





95 31 280: Large cutting capacity: maximum 52 mm dia. / 380 mm<sup>2</sup>

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
```

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |   | Tool            | Handles  | Cutting c<br>Ø mm | apacities<br>mm² | МСМ | ۲<br>g |  |
|-------------|-----------------|-----------------|---|-----------------|--|-------------------|------------------|-----|--------|--|
| 95 31 250   | 043935          | 250             | ⊕ /WN <b>£</b> \$                             | black lacquered | with multi-component grips                       | 32                | 240              | 500 | 676    |  |
| 95 31 280   | 043942          | 280             | ⊕ /WN <b>£</b> \$                             | black lacquered | with multi-component grips                       | 52                | 380              | 750 | 860    |  |
| 95 36 250   | 026884          | 250             | ≙ 1000 V 🖄 🚭 🤂 MM 🖭                           | 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           | Iovable spare blade for 95 31 250 / 95 36 250 |                 |  |                   |                  |     |        |  |
| 95 39 280   | 025283          | Movab           | le spare blade for 95 31 280 / 9              | 5 36 280        |  |                   |                  |     |        |  |



with telescopic handles



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

## 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 mm<sup>2</sup> (e.g. 4 x 70 mm<sup>2</sup> NYY) in copper and aluminium cables
- easier, neater cut due to optimised cuttingedge geometry
- adjustable bolted joint
- Cutting head: special quality high-grade tool steel, oil-hardened
- Handles: high-strength oval aluminium tubing

with adjusting button



Setting of a favourable handle width







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



Repeat cutting and opening actions until the cable is cut through



| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |           | Head      | Handles                    | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | МСМ | ۲۵<br>g |
|-------------|-----------------|----------------|-----------|-----------|----------------------------|-------------------|------------------------------|-----|---------|
| 95 32 038   | 071556          | 570            | <b>85</b> | burnished | with multi-component grips | 38                | 280                          | 550 | 1980    |
|             |                 |                |           |           |                            |                   |                              |     |         |

**95 39 038** 073260 Spare cutter head for 95 32 038

handle length with multiple

position adjustment from

working conditions

400 - 600 mm (short transport

length, individual adaptation to

#### 95 32 Cable Cutters (ratchet action)

#### with telescopic handles



- 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 highgrade tool steel, oil-hardened
- Handles: high-strength oval aluminium tubing



**95 32 060** tool in length: 630 to 830 mm; weight only approx. 3820 g



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |   | Head                                  | Head Handles               |     | apacities<br>mm <sup>2</sup> | МСМ  | ۲۵<br>g |  |  |
|-------------|-----------------|-----------------|---|---------------------------------------|----------------------------|-----|------------------------------|------|---------|--|--|
| 95 32 060   | 071563          | 630             | <b>81</b>                                 | burnished                             | with multi-component grips | 60  | 740                          | 1400 | 3820    |  |  |
| 95 32 100   | 071570          | 680             | WEB                                       | burnished                             | with multi-component grips | 100 | 960                          | 1900 | 4980    |  |  |
|             |                 |                 |   |                                       |                            |     |                              |      |         |  |  |
| 95 39 720   | 025290          | Movab           | le spare blade                            | spare blade for 95 31 720 / 95 32 060 |                            |     |                              |      |         |  |  |
| 95 39 870   | 025306          | Movab           | ole spare blade for 95 31 870 / 95 32 100 |                                       |                            |     |                              |      |         |  |  |

### 95 6 Wire Rope Shears forged

double function: neat cutting, precise crimping





Cuts all wire ropes without splaying, including those that are extremely strong, such as for example tyre cord

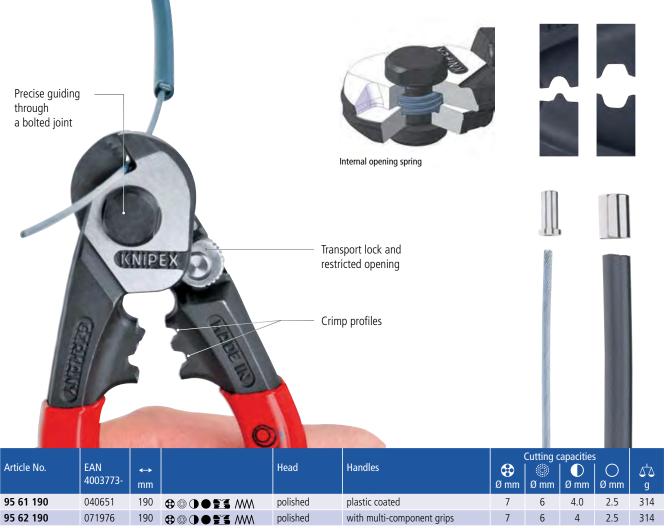
- with two crimping dies for end caps on Bowden cable sheaths and end ferrules for traction cables
- comfortable work thanks to handy, slim design and internal opening spring
- bolted joint for precise blade guidance, re-adjustable
- high leverage for reduced effort
- cutting-edge hardness approx. 64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



Crimping of the end ferrule onto the traction cable



Crimping of the end caps on the Bowden cable sheath



#### **95** 6 **Bowden Cable Cutter** for Bowden cables and soft High-grade special tool steel, wire rope up to 3.0 mm dia. forged, oil-hardened (also V2A) smooth and clean cutting due ENITER 05.61 to special shape of the cutting edges sickle shape cutting edges surround the material and prevent the wire rope fanning out 95 61 150 little handforce required due © 🛃 MM to very high transmission ratio • with opening spring and locking device cutting edges additionally induction hardened

| Article No. | EAN<br>4003773- | <b>∢-→</b><br>mm |                 | Shears             | Head     | Handles        | Cutting capacities | ۵'۵<br>g |
|-------------|-----------------|------------------|-----------------|--------------------|----------|----------------|--------------------|----------|
| 95 61 150   | 065197          | 150              | © <b>E</b> 5 MM | black atramentized | polished | plastic coated | 3                  | 205      |

95

### Wire Rope and ACSR-Cable Cutters



- 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
- Iow 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

| 95 77 600 |   |            |  |
|-----------|---|------------|--|
| <u> </u>  | € | $\diamond$ |  |

| Article No. | EAN<br>4003773- | <b>∢</b> > |   | Head     | Handles                | €               | Cutting o |      | $  \bigcirc  $ | AWG | 52   |
|-------------|-----------------|------------|---|----------|------------------------|-----------------|-----------|------|----------------|-----|------|
|             | 4003773-        | mm         |   |          |                        | mm <sup>2</sup> | Ømm       | Ømm  | Ømm            |     | g    |
| 95 71 445   | 014522          | 445        | <b>8</b> • <b>1</b>                         | polished | with plastic grips     | 95              | 10.0      | 7.0  |                | 3/0 | 1083 |
| 95 71 600   | 014539          | 600        | <b>\$</b> © <b>11</b>                       | polished | with plastic grips     | 150             | 14.0      | 9.0  |                | 5/0 | 1716 |
| 95 77 600   | 025313          | 600        | 🟦 1000 V 🤂 🛞 🖺 🏅                            | polished | with dipped insulation | 150             | 14.0      | 9.0  |                | 5/0 | 2359 |
| 95 81 600   | 025344          | 600        | <b>8</b>                                    | polished | with plastic grips     | 150             | 16.0      | 10.0 | 4.5            | 5/0 | 2256 |
|             |                 |            |   |          |                        |                 |           |      |                |     |      |
| 95 79 445   | 025320          | Spare      | pare cutter head for 95 71 445              |          |                        |                 |           |      |                |     |      |
| 95 79 600   | 025337          | Spare      | Spare cutter head for 95 71 600 / 95 77 600 |          |                        |                 |           |      |                |     |      |
| 95 89 600   | 025351          | Spare      | cutter head for 95 81 600                   |          |                        |                 |           |      |                |     |      |

.....

## Crimp Grip Pliers



97 00 215 A

- 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

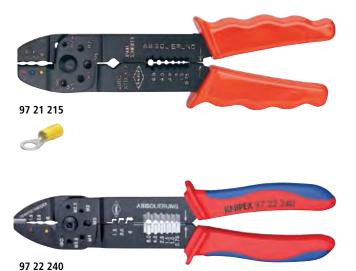
#### 97 00 215 D

crimps conductor and insulation in one single operation

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |    | Pliers    | Head      | Handles          |          |                | Applications  | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲٦<br>g |
|-------------|-----------------|-----------------|----|-----------|-----------|------------------|----------|----------------|---|-----------------------------|---------|------------------------------------|---------|
| 97 00 215 A | 006497          | 215             | MM | burnished |           |                  | ۵        | J.             | insulated terminals<br>and plug connectors                        | 0.5 - 6.0                   | 20 - 10 | 3                                  | 520     |
| 97 00 215 B | 006503          | 215             | MM |           | burnished | nickel<br>plated | <b>A</b> | and the second | non-insulated open<br>plug-type connectors<br>(plug width 6.3 mm) | 0.5 - 6.0                   | 20 - 10 | 3                                  | 520     |
| 97 00 215 D | 006527          | 215             | MM | burnished |           |                  | ۵        | J.             | insulated terminals<br>and plug connectors                        | 0.5 - 6.0                   | 20 - 10 | 3                                  | 513     |

## <sup>97</sup> Crimping Pliers

(Careb



## • for cutting cables, stripping wire and crimping insulated and non-insulated terminals, connectors and plug type connectors

- $\hfill with threaded holes for cutting copper and brass screws threaded M 2.6 / 3.0 / 3.5 / 4.0 and 5.0 mm$
- Special steel, high-strength



#### Number of Article No. EAN Pliers Handles Applications AWG Capacity 52 4-> crimping positions 4003773 mm<sup>2</sup> mm with plastic insulated terminals and 97 21 215 0.75 - 6.0 224 019688 215 burnished Ð 18 - 10 3 plug connectors grips non-insulated open with plastic 97 21 215 B 019695 215 burnished plug-type connectors 0.5 - 2.5 20 - 13 3 221 *i*۹ grips (plug width 6.3 mm) non-insulated terminals with plastic 97 21 215 C 019701 0.5 - 6.0 3 222 215 burnished 20 - 10 V and plug connectors grips insulated terminals and 0.75 - 6.0 18 - 10 3 Ы plug connectors with multiblack lacque-97 22 240 070726 240 300 component non-insulated open red grips 0.5 - 6.0 20 - 10 3 Α plug-type connectors e (plug width 6.3 mm)

### <sup>97</sup> <sup>32</sup> Crimping Pliers



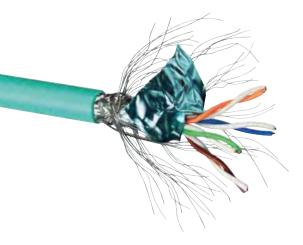




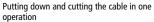
- tool for putting on boards, sockets and fields
- pushing down and cutting in one operation
- for UTP and STP cables, conductor 0.4 0.8 mm dia.

• for cutting cables, stripping wire and crimping insulated and

- with integrated pulling hook and release blade
- Housing: plastic, impact-proof









With integrated pulling hook

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | Head      | Applications                                | Capacity<br>Ø mm | ۲۵<br>g |  |
|-------------|-----------------|-----------------|-----------|---|------------------|---------|--|
| 97 40 10    | 044895          | 175             | burnished | UTP- and STP-cables, LSA-Plus and identical | 0.4 - 0.8        | 100     |  |

### <sup>97</sup> <sup>33</sup> KNIPEX MultiCrimp<sup>®</sup>

Crimping Pliers with quick changer magazine



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

- just one tool for the most common crimping applications
- crimping dies changed quickly and easily without any additional tool
- secure and protected 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

#### 97 33 01

Crimping pliers with round magazine and three interchangeable die sets for non-insulated open plug connectors (4.8 + 6.3 mm width) from  $0.5 - 6.0 \text{ mm}^2$ ; insulated terminals + plug connectors from  $0.5 - 6.0 \text{ mm}^2$ ; end sleeves (ferrules) from  $0.25 - 6.0 \text{ mm}^2$ 

#### 97 33 02

Crimping pliers with round magazine and five interchangeable die sets for noninsulated open plug connectors (4.8 + 6.3 mm width) from 0.5 - 6.0 mm<sup>2</sup>; insulated terminals + plug connectors from 0.5 - 6.0 mm<sup>2</sup>; end sleeves (ferrules) from 0.25 - 6.0 mm<sup>2</sup>; non-insulated terminals and plug connectors from 0.5 - 10 mm<sup>2</sup>; non-insulated butt connectors from 1.5 - 10 mm<sup>2</sup>

The MultiCrimp® Pliers are not available in the U.S.A.



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

### **CRIMPING PLIERS**



Magazine for crimping dies can be carried on a belt



Clearly visible marking on the crimping dies with pictograms

#### The MultiCrimp® Pliers are not available in the U.S.A.

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |    | Pliers    | Handles                         |   |  | Applications                                   | Capacity<br>mm <sup>2</sup> | AWG               | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|----|-----------|---------------------------------|---|--|--|-----------------------------|-------------------|------------------------------------|-----------------------|
|             |                 |                 |    |           |                                 |   | and the second s | non-insulated, open plug-<br>type connectors   | 0.5 - 6.0                   | 20 - 10           | 3                                  |                       |
| 97 33 01    | 066927          | 250             | MM | burnished | with multi-com-<br>ponent grips | ٦ | J.   | insulated terminals and plug connectors        | 0.5 - 6.0                   | 20 - 10           | 3                                  | 770                   |
|             |                 |                 |    |           |                                 |   | <i>,</i>   | End Sleeves (ferrules)                         | 0.25 - 6.0                  | 23 - 10           | 5                                  |                       |
|             |                 |                 |    |           |                                 |   | -  | non-insulated, open plug-<br>type connectors   | 0.5 - 6.0                   | 20 - 10           | 3                                  |                       |
|             |                 |                 |    |           |                                 | ٦ | P  | insulated terminals and plug connectors        | 0.5 - 6.0                   | 20 - 10           | 3                                  |                       |
| 97 33 02    | 066934          | 250             | MM | burnished | with multi-com-<br>ponent grips |   | <i>,</i>   | End Sleeves (ferrules)                         | 0.25 - 6.0                  | 23 - 10           | 5                                  | 870                   |
|             |                 |                 |    |           |                                 | V | -  | non-insulated terminals<br>and plug connectors | 0.5 - 10.0                  | 20 - 7            | 4                                  |                       |
|             |                 |                 |    |           |                                 |   |  | non-insulated butt connectors                  | 1.5 - 4.0<br>6.0 + 10.0*    | 15 - 11<br>10 + 7 | 3<br>2                             |                       |

| 97 39 05 | 070078 | Crimping dies for non-insulated open plug-type connectors 4.8 + 6.3 mm | and the second s |
|----------|--------|--|--|
| 97 39 06 | 070085 | Crimping dies for insulated terminals + plug connectors                | P  |
| 97 39 08 | 070092 | Crimping dies for end sleeves (ferrules)                               | -  |
| 97 39 13 | 070108 | Crimping dies for non-insulated terminals + plug connectors            | A  |
| 97 39 30 | 070115 | Crimping dies for non-insulated butt connectors                        | -  |
| 97 39 90 | 070061 | Quick Changer Magazine empty   |  |

\* compression joints in conformance to DIN 46267

#### (PATENTED)

Crimp System Pliers for exchangeable crimping dies



MM



97 43 200 A MM



Crimp System Pliers 97 43 200 with crimping dies 94 49 30 for non-insulated butt connectors



Crimp System Pliers 97 43 200 with crimping dies 97 49 35 for spark plug connectors



97 43 200 with crimping dies 97 49 61 and revolvable locator 97 49 90 for turned types of connectors with varying pin diameters



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

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |    |   |  | Pliers    | Handles                         | Applications   | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|----------------|----|---|--|-----------|---------------------------------|--|-----------------------------|---------|------------------------------------|-----------------------|
| 97 43 200   | 030812          | 200            | MM |   |  | burnished | with multi-com-<br>ponent grips | see crimping dies table  |                             |         |                                    | 988                   |
| 97 43 200 A | 071587          | 200            | MM |   |  | burnished | with multi-com-<br>ponent grips | see crimping dies table  |                             |         |                                    | 574                   |
| 97 43 05    | 031031          | 200            | MM |   | and the second s | burnished | with multi-com-<br>ponent grips | Crimp System Pliers for non-insula-<br>ted open plug-type connectors<br>(4.8 and 6.3 mm connector width) | 0.5 - 6.0                   | 20 - 10 | 3                                  | 618                   |
| 97 43 06    | 031048          | 200            | MM | ۵ | ×  | burnished | with multi-com-<br>ponent grips | Crimp System Pliers for insulated terminals and plug connectors  | 0.5 - 6.0                   | 20 - 10 | 3                                  | 610                   |

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

- just one tool for almost 1000 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 43 200

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

#### 97 43 05

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

#### 97 43 06

with attached crimping dies for insulated terminals and plug connectors

# 97 49 Crimping Dies for Crimp System Pliers

| Article No. | EAN<br>4003773- |          |  | Applications  | Capacity<br>mm <sup>2</sup>              | AWG                | Capacity<br>SW mm                  | Sleeves<br>Ø mm                     | Number of<br>crimping<br>positions | ۵'ک<br>g |
|-------------|-----------------|----------|--|---|--|--------------------|------------------------------------|-------------------------------------|------------------------------------|----------|
| 97 49 04    | 030850          | <b>/</b> | طعيري  | non-insulated Plug Connectors   | 0.1 - 2.5                                | 27 - 13            |                                    |                                     | 4                                  | 42       |
| 97 49 05    | 030867          |          | and the second   | non-insulated Plug Connectors   | 0.5 - 6.0                                | 20 - 10            |                                    |                                     | 3                                  | 46       |
| 97 49 06    | 030836          |          | J  | insulated terminals and plug connectors   | 0.5 - 6.0                                | 20 - 10            |                                    |                                     | 3                                  | 45       |
| 97 49 08    | 030874          |          |  | End Sleeves (ferrules)  | 0.25 - 6.0                               | 23 - 10            |                                    |                                     | 5                                  | 49       |
| 97 49 09    | 030881          |          |  | End Sleeves (ferrules)  | 10 / 16 / 25                             | 7/ 5/ 3            |                                    |                                     | 3                                  | 50       |
| 97 49 13    | 030843          | V        | or   | non-insulated terminals and plug connectors                                       | 0.5 - 10.0                               | 20 - 7             |                                    |                                     | 4                                  | 37       |
| 97 49 15    | 043164          | <b>A</b> | -Ye  | lug connectors and non-insulated open plug type<br>connectors (plug width 6.3 mm) | 1.25-2.5 +<br>3.0-6.0                    | 17 - 13;<br>12 - 9 |                                    |                                     | 2 + 1                              | 56       |
| 97 49 16    | 040675          | 2        |  | insulated terminals and plug connectors   | 10.0 - 16.0                              | 7/5                |                                    |                                     | 2                                  | 46       |
| 97 49 18    | 063186          |          | Þ  | Twin end sleeves (ferrules) for two flexible conductors                           | 2x6 / 10 / 16                            | 10 / 7 / 5         |                                    |                                     | 3                                  | 48       |
| 97 49 19    | 030898          |          |  | End Sleeves (ferrules)  | 35 - 50                                  | 2/0                |                                    |                                     | 2                                  | 46       |
| 97 49 20    | 045069          |          | 5  | F-connectors for TV and satellite connections                                     |  |                    | 7.0; 8.4; 8.1                      | 7.7; 9.5;                           | 3                                  | 50       |
| 97 49 23    | 052135          |          |  | non-insulated terminals and plug connectors                                       | 16 + 25                                  | 5 + 3              | 7.0, 0.1, 0.1                      | 9.5                                 | 2                                  | 45       |
| 97 49 23    | 030911          |          | Correction of the second secon | D Sub; HD 20; HDE plug  | 0.03 - 0.56                              | 32 - 20            |                                    |                                     | 3                                  | 43       |
| 97 49 30    | 030904          |          |  | non-insulated butt connectors   | 1.5 - 4.0                                | 15 - 11            |                                    |                                     | 3                                  | 37       |
|             |                 |          |  |   | 6.0 + 10.0*                              | 10 + 7             |                                    |                                     | 2                                  |          |
| 97 49 35    | 034315          | <u> </u> | <b>E</b>   | spark plug connectors and distributors  | 1  | 17                 |                                    |                                     | 5                                  | 52       |
| 97 49 40    | 030959          |          | Ø.   | Coax connectors RG 58, 59, 62, 71, 223  |  |                    | 5.4; 6.48;<br>1.72                 | 6.4; 7.6;<br>2.1                    | 3                                  | 57       |
| 97 49 44    | 041443          | A        | and the second of  | rolled contacts   | 0.14 - 1.5                               | 26 - 15            |                                    |                                     | 3                                  | 45       |
| 97 49 50    | 030966          |          | Ø.   | Coax connectors / Car phone RG 58, 174, 188, 316                                  |  |                    | 3.25; 4.52;<br>5.41; 1.72;<br>1.07 | 3.9, 5.4;<br>6.4; 2.1;<br>1.3; 0.95 | 6                                  | 48       |
| 97 49 54    | 041450          | A        | on the   | modular plugs   | 0.5 - 2.5                                | 20 - 13            |                                    |                                     | 4                                  | 49       |
| 97 49 59    | 073734          |          |  | solar cable connectors Helios H4 (Amphenol)                                       | 2.5 + 4.0 +<br>6.0 mm <sup>2</sup>       | 13 - 10            |                                    |                                     | 3                                  | 35       |
| 97 49 60    | 030928          |          |  | turned contacts (HTS + Harting)   | 0.14 - 4.0                               | 26 - 11            |                                    |                                     | 4                                  | 53       |
| 97 49 62    | 063179          | 00       |  | solar cable connectors (Huber + Suhner)   | 2.5 + 4.0                                | 13 + 11            |                                    |                                     | 3                                  | 41       |
| 97 49 63    | 066675          |          |  | solar cable connectors (Huber + Suhner)   | 4.0 + 6.0                                | 11 + 10            |                                    |                                     | 3                                  | 33       |
| 97 49 64    | 044055          |          |  | ABS connectors  | 1.0 - 6.0                                | 17 - 10            |                                    |                                     | 2                                  | 73       |
| 97 49 65    | 066682          |          | and the same   | solar cable connectors MC3 (Multi-Contact)  | 2.5 - 6.0                                | 13 - 10            |                                    |                                     | 3                                  | 33       |
| 97 49 66    | 066699          |          | - Carlo  | solar cable connectors MC4 (Multi-Contact)  | 2.5 - 6.0                                | 13 - 10            |                                    |                                     | 3                                  | 33       |
| 97 49 66 4  | 072096          |          | Cartaly Cart   | solar cable connectors MC4 (Multi-Contact) cutting -<br>stripping - crimping      | 4.0                                      | 11                 |                                    |                                     | 1                                  | 35       |
| 97 49 66 6  | 072102          |          | ( the  | solar cable connectors MC4 (Multi-Contact) cutting -<br>stripping - crimping      | 6.0                                      | 10                 |                                    |                                     | 1                                  | 35       |
| 97 49 67    | 066705          | A        | 5 Jul  | solar cable connectors (Hirschmann)   | 2.5 - 6.0                                | 13 - 10            |                                    |                                     | 3                                  | 33       |
| 97 49 68    | 066712          |          | -  | solar cable connectors (Tyco)   | 1.5 - 6.0                                | 15 - 10            |                                    |                                     | 4                                  | 33       |
| 97 49 69 1  | 072119          |          | -  | solar cable connectors (Wieland)  | 1.5 - 2.5                                | 15 + 13            |                                    |                                     | 2                                  | 35       |
| 97 49 69 2  | 072126          |          | a de la come de la com | solar cable connectors (Wieland)  | 4.0 - 10.0                               | 11 - 7             |                                    |                                     | 3                                  | 35       |
| 97 49 70    | 030942          |          |  | Western plugs   | 4, 6, 8-poles<br>RJ 10 / 11 /<br>12 / 45 |                    |                                    |                                     | 3                                  | 72       |
| 97 49 74    | 044062          |          | 8  | unshielded Molex plugs  | 4, 6, 8-poles<br>RJ 10 / 11 /<br>12 / 45 |                    |                                    |                                     | 3                                  | 42       |
| 97 49 76    | 047513          |          | 1  | shielded Stewart plugs  |  |                    |                                    |                                     | 2                                  | 50       |
| 97 49 81    | 042778          |          | -987   | Harting connectors for fibre optics   |  |                    | 3.0; 4.95;<br>6.5                  | 3.5; 6.0;<br>7.5                    | 3                                  | 52       |
| 97 49 82    | 042785          |          | 33   | Telegärtner connectors for fibre optics   |  |                    | 3.25; 3.65;<br>4.52                | 3.6; 4.0;<br>5.4                    | 3                                  | 58       |

## Crimping Dies for Crimp System Pliers

| Article No. | EAN<br>4003773- |     | Applications                                       | Capacity<br>mm <sup>2</sup> | AWG | Capacity<br>SW mm | Sleeves<br>Ø mm  | Number of<br>crimping<br>positions | ۲۵<br>g |
|-------------|-----------------|-----|--|-----------------------------|-----|-------------------|------------------|------------------------------------|---------|
| 97 49 83    | 044079          | -31 | F-SMA, ST-,SC + STSC/K-connectors for fibre optics |                             |     | 3.65; 4.2;<br>5.0 | 4.3; 5.4;<br>6.0 | 3                                  | 60      |
| 97 49 84    | 042792          | 33  | Harting/Suhner connectors for fibre optics         |                             |     | 3.8; 4.3;<br>4.95 | 4.5; 5.2;<br>6.0 | 3                                  | 52      |
| 97 49 87    | 043331          | - B | F-SMA, ST and MIC connectors for fibre optics      |                             |     | 8.7               | 9.5              | 1                                  | 46      |

\* compression joints in conformance to DIN 46267

#### Locators for crimping pliers and crimping dies

| Article No. | EAN<br>4003773- | Applications  | ٹک<br>g |
|-------------|-----------------|---|---------|
| 97 49 59 1  | 073741          | Locator for 97 49 59  | 55      |
| 97 49 65 1  | 066729          | Locator for 97 49 65 (solar cable connectors MC3)               | 72      |
| 97 49 66 1  | 066736          | Locator for 97 49 66 (solar cable connectors MC4)               | 72      |
| 97 49 68 1  | 066743          | Locator for 97 49 68 (solar cable connectors Solarlok)          | 72      |
| 97 49 69 11 | 072133          | Locator for 97 49 69 1 and 97 49 69 2                           | 55      |
| 97 49 90    | 031017          | Locator for 97 49 60 (HTS+Harting)                              | 69      |
| 97 49 93    | 047926          | Locator for 97 49 24 (D-Sub-plugs)                              | 39      |
| 97 49 94    | 030997          | Locator for 97 49 04 / 97 52 04 / 97 52 34                      | 69      |
| 97 49 95    | 031000          | Locator for 97 49 05 / 97 52 05 / 97 52 35                      | 22      |
| 97 59 65 2  | 071600          | Locator for 97 52 65 / 97 52 65 A / 97 52 65 DG / 97 52 65 DG A | 237     |

Locator 97 59 65 2 for four-mandrel crimping pliers, adjustable in length and diameter for various plugs

### **Mounting Tool for MC3 connectors**



97 49 65 2

- for easy and quick assembly of MC3 solar cable connectors
- for fit solar sleeves for connectors from 2.5 to 10.0 mm<sup>2</sup>
- three capsules (2.5 / 4.0; 6.0; 10.0 mm<sup>2</sup>) 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

| SOLAR IC    | JOL             |                 |                 |         |
|-------------|-----------------|-----------------|-----------------|---------|
| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Capacity<br>mm² | ۵۵<br>g |
| 97 49 65 2  | 072010          | 325             | 2.5 - 10.0      | 460     |
| 97 49 65 2  | 072010          | 325             | 2.5 - 10.0      | 460     |

97

### Set of Mounting Tools

for solar cable connectors MC4 (Multi-Contact)



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)
- Tool: plastic, fibreglass reinforced

**SOLAR TOOL** 

| Article No. | EAN      | ↔   | ۵'ک |
|-------------|----------|-----|-----|
|             | 4003773- | mm  | g   |
| 97 49 66 2  | 074106   | 115 | 18  |

## <sup>97</sup><sub>50</sub> Crimping Pliers for Scotchlok

**connectors** with side cutter

- 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
- cutting edges additionally induction hardened
- with opening spring
- Vanadium electric steel; forged, oil-hardened



| l |  | Ĺ | J |  |
|---|--|---|---|--|
|   |  |   |   |  |

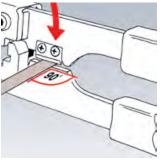
| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |    |            | Head     | Handles        | Applications               | Capacity<br>Ø mm | ۲۵<br>g |  |
|-------------|-----------------|----------------|----|------------|----------|----------------|----------------------------|------------------|---------|--|
| 97 50 01    | 028239          | 155            | MM | <u>@</u> > | polished | plastic coated | Scotchlok single connector | 0.4 - 1.1        | 135     |  |



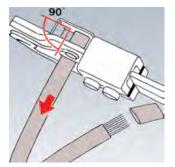
MM

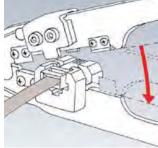
## Crimping Pliers for Western plugs

- 97 51 04
- for cutting and stripping unshielded ribbon telephone cables
- for crimping 4-pole Western plugs type RJ 10 (7.65 mm wide)
- Chrome vanadium electric steel in special quality, oil-hardened



Cut cables





Strip cables

Crimp Western plugs

| Article No. | EAN<br>4003773- | <b>∢-</b> ►<br>mm |    |          | Pliers    | Handles            | Capacity                | Number of<br>crimping<br>positions | ۵'ک<br>g |
|-------------|-----------------|-------------------|----|----------|-----------|--------------------|-------------------------|------------------------------------|----------|
| 97 51 04    | 028048          | 190               | MM | <u>s</u> | burnished | with plastic grips | RJ 10 (4-poles) 7.65 mm | 1                                  | 218      |
|             |                 |                   |    |          |           |                    |                         |                                    |          |

## 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<br>4003773- | <b>←→</b><br>mm |          |         |          | Pliers     | Handles                    | Capacity   | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|----------|---------|----------|------------|----------------------------|--|------------------------------------|-----------------------|
| 97 51 10    | 043171          | 190             | MM       |         |          | burnished  | with multi-component grips | RJ 11/12 (6-poles) 9.65 mm RJ 45<br>(8-poles) 11.68 mm | 2                                  | 340                   |
| 97 59 06    | 029700          | 4 spar          | e blades | s for 9 | 97 51 04 | / 97 51 10 |                            |  |                                    |                       |

## Crimping Pliers for Western plugs



- professional tool for cutting and stripping unshielded ribbon telephone cables
- for crimping 4-, 6- and 8-pole Western plugs type RJ 10 (7.65 mm width), type RJ 11/12 (9.65 mm width) and type RJ 45 (11.68 mm width)
- exact crimping process due to parallel crimping
- repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- optimum transmission of force due to toggle lever action for fatigue-reduced operation
- 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<br>4003773- | <b>←→</b><br>mm |    |         | Pliers    | Handles                         | Capacity   | Number of<br>crimping<br>positions | ۲۵<br>g |
|-------------|-----------------|-----------------|----|---------|-----------|---------------------------------|--|------------------------------------|---------|
| 97 51 12    | 043188          | 200             | MM | <u></u> | burnished | with multi-compo-<br>nent grips | RJ 10 (4-poles) 7.65 mm RJ 11/12 (6-poles)<br>9.65 mm RJ 45 (8-poles) 11.68 mm | 3                                  | 522     |
|             |                 |                 |    |         |           |                                 |  |                                    |         |

97 59 12 Spare blades for 97 51 12 069997

# 97 52 Crimping Pliers also for two-hand operation









97 52 06 MM









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



• for solder-free electrical connections

lock (self-releasing mechanism)

re-adjustable

compared with regular crimping pliers

head and ergnomically shaped handles

• the ingenious lever transmission reduces the handforce up to 30 %

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

• crimping pressure has been set precisely (calibrated) in the factory,

• two-hand operation for easy crimping of large conductor diameters • easy handling as a result of well balanced centre of gravity, angled

- Chrome vanadium electric steel in special quality, oil-hardened

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 6.0 mm<sup>2</sup>, two-hand operation is possible by the longer handles

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |          | Pliers     | Handles                     |   |  | Applications                                   | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲<br>g |
|-------------|-----------------|-----------------|----------|------------|-----------------------------|---|--|--|-----------------------------|---------|------------------------------------|--------|
| 97 52 04    | 025450          | 250             | MM       | burnished  | with non-slip plastic grips | A | and the second s | non-insulated, open<br>plug-type connectors    | 0.1 - 2.5                   | 27 - 13 | 4                                  | 562    |
| 97 52 05    | 025467          | 250             | MM       | burnished  | with non-slip plastic grips | A | -  | non-insulated, open<br>plug-type connectors    | 0.5 - 6.0                   | 20 - 10 | 3                                  | 572    |
| 97 52 06    | 025474          | 250             | MM       | burnished  | with non-slip plastic grips | ۵ | A  | insulated terminals and plug connectors        | 0.5 - 6.0                   | 20 - 10 | 3                                  | 565    |
| 97 52 08    | 025481          | 250             | MM       | burnished  | with non-slip plastic grips | ☑ |  | End Sleeves (ferrules)                         | 0.25 - 6.0                  | 23 - 10 | 5                                  | 565    |
| 97 52 09    | 025498          | 250             | MM       | burnished  | with non-slip plastic grips |   | <i>~</i>   | End Sleeves (ferrules)                         | 10 / 16<br>/ 25             | 7/ 5/ 3 | 3                                  | 571    |
| 97 52 10    | 023678          | 250             | MM       | burnished  | with non-slip plastic grips |   | Ø.   | Coax-, BNC- and TNC-<br>connectors             |                             |         | 3                                  | 577    |
| 97 52 13    | 048084          | 250             | MM       | burnished  | with non-slip plastic grips | ⊻ | A  | non-insulated terminals<br>and plug connectors | 0.5 - 10.0                  | 20 - 7  | 4                                  | 558    |
| 97 52 19    | 052142          | 250             | MM       | burnished  | with non-slip plastic grips | ۳ |  | End Sleeves (ferrules)                         | 35 + 50                     | 2 + 0   | 2                                  | 567    |
| 97 52 23    | 052159          | 250             | MM       | burnished  | with non-slip plastic grips | V | A  | non-insulated terminals<br>and plug connectors | 16 + 25                     | 5 + 3   | 2                                  | 565    |
|             |                 |                 |          |            |                             |   |  |  |                             |         |                                    |        |
| 97 49 94    | 030997          | Locato          | r for 97 | 49 04 / 97 | 52 04 / 97 52 34            |   |  |  |                             |         |                                    |        |
| 97 49 95    | 031000          | Locato          | r for 97 | 49 05 / 97 | 52 05 / 97 52 35            |   |  |  |                             |         |                                    |        |

# 97 52 Crimping Pliers short design



- repetitive, high crimping quality due to precision dies and integral lock (self-releasing mechanism)
- crimping pressure has been set precisely (calibrated) in the factory, re-adjustable
- optimum transmission of force due to toggle lever action for fatigue-reduced operation good handling due to 20° angled head, low weight and
- short design
- Chrome vanadium electric steel in special quality, oil-hardened



#### 97 52 14

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

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm       |    | Pliers    | Handles                         |  |  | Applications  | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲۵<br>g |
|-------------|-----------------|----------------------|----|-----------|---------------------------------|--|--|---|-----------------------------|---------|------------------------------------|---------|
| 97 52 14    | 026808          | 195                  | MM | burnished | with multi-compo-<br>nent grips |  | and the second s | non-insulated open plug<br>type connectors (plug<br>width 2.8 + 4.8 mm) | 0.10 - 1.5                  | 27 - 16 | 4                                  | 387     |
| 97 52 20    | 026853          | 195                  | MM | burnished | with multi-compo-<br>nent grips |  | Ø.   | Coax-, BNC- and<br>TNC-connectors RG<br>58/59/62/71/223                 |                             |         | 3                                  | 380     |
|             |                 |                      |    |           |                                 |  |  |   |                             |         |                                    |         |
| 97 59 14    | 026976          | Locator for 97 52 14 |    |           |                                 |  |  |   |                             |         |                                    |         |

### 97 52 KNIPEX PreciForce<sup>®</sup> Crimping Pliers



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<sup>®</sup>.

- 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
- high transmission of force thanks to toggle lever action for fatiguereduced working
- 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

Number of Article No. EAN Pliers Handles Applications Capacity AWG crimping 52 positions 4003773mm<sup>2</sup> mm 1.5 - 4.0 6.0 + 10.0\* with multi-component non-insulated butt 15 - 11 3 97 52 30 MM 051855 220 burnished 477 connectors 10 + 7 2 grips with multi-component non-insulated terminals 97 52 33 051862 220 V 0.5 - 10.0 20 - 7 4 478 MW burnished grips and plug connectors non-insulated open plug with multi-component 97 52 34 051879 220 MW burnished type connectors (plug width 2.8 + 4.8 mm) 0.1 - 2.5 27 - 13 Δ 483 grips non-insulated open plug with multi-component type connectors (plug width 4.8 + 6.3 mm) 97 52 35 051886 0.5 - 6.0 494 220 MW burnished 20 - 10 3 grips insulated terminals and with multi-component 97 52 36 051893 MW burnished 0.5 - 6.0 20 - 10 3 487 220 Ы grips plug connectors heat shrinkeable sleeve with multi-component 063193 478 97 52 37 220 MM burnished 05-60 20 - 10 3 connectors grips with multi-component End Sleeves (ferrules) 051909 97 52 38 220 **MM** burnished 0.25 - 6.0 23 - 10 5 493 grips Coax-, BNC- and with multi-component 051916 TNC-connectors for RG 58/174/188/316 97 52 50 498 220 MM burnished 6 grips

 97 49 94
 030997
 Locator for 97 49 04 / 97 52 04 / 97 52 34

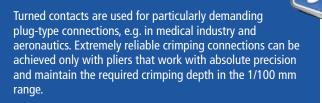
 97 49 95
 031000
 Locator for 97 49 05 / 97 52 05 / 97 52 35

\* compression joints in conformance to DIN 46267

### Four-Mandrel Crimping Pliers for turned contacts



97 59 65 2



- 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 the plastic case with foam insert and standard locator for precise positioning of the contacts

#### 97 52 63 DG

fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; with digital display of the preset crimping capacities; display reversible between mm / inch and MIL numerical values; 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 DG

fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; with digital display of the preset crimping capacities; display reversible between mm / inch and MIL numerical values; 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 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 A

fine adjustment of pressure depending on the conductor's diameter by means of adjusting wheel; with digital display of the preset crimping capacities; display reversible between mm / inch and MIL numerical values; with table for calculating the settings; pliers in a plastic case with foam insert; without locator

#### 97 59 65 2

Universal Locator for 97 52 65 / 97 52 65 A / 97 52 65 DG / 97 52 65 DG A; Chrome vanadium electric steel in special quality, oil-hardened

 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 contacts in the four-mandrel crimping pliers' capacity range

### **CRIMPING PLIERS**



Standard locator



| Article No.   | EAN<br>4003773- | <b>∢→</b><br>mm |                  | Pliers           | Handles                           |   | Applications  | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲<br>ع |
|---------------|-----------------|-----------------|------------------|------------------|-----------------------------------|---|---|-----------------------------|---------|------------------------------------|--------|
| 97 52 63      | 050148          | 180             | (PATENTED)       | nickel<br>plated | with multi-<br>component<br>grips | × | <br>turned contacts   | 0.08 - 2.5                  | 28 - 13 | 1                                  | 388    |
| 97 52 63 DG   | 063209          | 195             | (PATENTED)       | nickel<br>plated | with multi-<br>component<br>grips | B | <br>turned contacts   | 0.08 - 2.5                  | 28 - 13 | 1                                  | 388    |
| 97 52 64      | 044093          | 180             | MM               | nickel<br>plated | with multi-<br>component<br>grips | × | <br>turned contacts   | 0.08 - 2.5                  | 28 - 13 | 1                                  | 424    |
| 97 52 65      | 045236          | 230             | (PATENTED)<br>MM | nickel<br>plated | with multi-<br>component<br>grips | × | <br>turned contacts (Harting; Ilme;<br>Phoenix; Amphenol; Walther;<br>HTS; Contact; Weidmüller) | 0.14 - 6.0                  | 25 - 10 | 1                                  | 676    |
| 97 52 65 DG   | 063216          | 250             | (PATENTED)<br>MM | nickel<br>plated | with multi-<br>component<br>grips | × | <br>turned contacts (Harting; Ilme;<br>Phoenix; Amphenol; Walther;<br>HTS; Contact; Weidmüller) | 0.14 - 6.0                  | 25 - 10 | 1                                  | 633    |
| 97 52 65 A    | 071594          | 250             | (PATENTED)<br>MM | nickel<br>plated | with multi-<br>component<br>grips | × | <br>turned contacts (Harting; Ilme;<br>Phoenix; Amphenol; Walther;<br>HTS; Contact; Weidmüller) | 0.14 - 6.0                  | 25 - 10 | 1                                  | 604    |
| 97 52 65 DG A | 071990          | 250             | (PATENTED)<br>MM | nickel<br>plated | with multi-<br>component<br>grips | E | <br>turned contacts (Harting; Ilme;<br>Phoenix; Amphenol; Walther;<br>HTS; Contact; Weidmüller) | 0.14 - 6.0                  | 25 - 10 | 1                                  | 633    |

**97 59 65 2** 071600 Universal Locator for 97 52 65 / 97 52 65 A / 97 52 65 DG / 97 52 65 DG A

# <sup>97</sup> <sup>53</sup> Self-Adjusting Crimping Pliers for

end sleeves (ferrules) with lateral access

(PATENTED)







97 53 14 MM



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

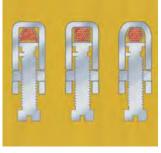
- Automatic self-adjustment to the end sleeve (ferrule) used: this allows the specialist to work with less strain and enables secure, reliable and quick crimping.
- Extensive range of applications: square crimping 0.08 to 10.0 mm<sup>2</sup>, hexagon crimping 0.08 to 6.0 mm<sup>2</sup>
- for crimping 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
- fits all twin ferrules within the application range
- lateral access of the end sleeves (ferrules) into the tool
- repetitive, high crimping quality due to integral lock (self-releasing mechanism)
- these tools have been set precisely (calibrated) in the factory, re-adjustable
- optimum transmission of force due to toggle lever action 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 04

square crimping for optimum contact areas in the clamp connection

97 53 14 hexagonal crimping for optimum positioning in confined areas





The square crimping allows better contact. The hexagonal crimping comes very close to the space-saving round shape. Compared with the square crimp, it has the same cross-section and can make optimum contact in narrow round terminal connectors. With both crimping shapes the often tricky feeding into the terminal connection is no longer necessary.



Square-crimped end sleeves (ferrules) always ensure good contact surfaces in the clamped connection

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |    | Pliers         | Handles                       |   |                 | Applications              | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲<br>g |
|-------------|-----------------|-----------------|----|----------------|-------------------------------|---|-----------------|---------------------------|-----------------------------|---------|------------------------------------|--------|
| 97 53 04    | 028017          | 180             | MM | burni-<br>shed | with multi-component<br>grips |   | <i>&gt;</i>     | End Sleeves<br>(ferrules) | 0.08 - 10                   | 28 - 7  | 1                                  | 405    |
| 97 53 14    | 041474          | 180             | MM | burni-<br>shed | with multi-component<br>grips | ۵ | <i>&gt;&gt;</i> | End Sleeves<br>(ferrules) | 0.08 - 6.0                  | 28 - 10 | 1                                  | 404    |

# <sup>97</sup> <sup>53</sup> Self-Adjusting Crimping Pliers for

end sleeves (ferrules) with front loading

(PATENTED)



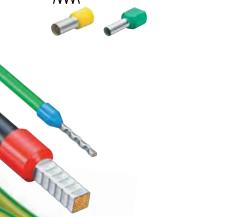
### 97 53 08 MM



97 53 09 MM







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 10.0 + 16.0 mm<sup>2</sup>
- Front loading: very helpful under difficult working conditions in confined spaces.
- for crimping end sleeves (ferrules) according to DIN 46228 parts 1+4
- self-adjusting adaptation to the desired end sleve (ferrule) size: no wrong crimps caused by using the wrong die
- fits all twin-ferrules within the application range
- 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 due to toggle lever action 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

crimping from 0.08 - 10.0 mm<sup>2</sup> in one profile; end sleeves (ferrules) up to 2.5 mm<sup>2</sup> can also be loaded parallely from the side

#### 97 53 09

crimping from 0.08 - 10.0 and 16.0 mm<sup>2</sup> in one profile; with selector lever for setting the crimping area either to 0.08 - 10 mm<sup>2</sup> or 16 mm<sup>2</sup>



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 mm<sup>2</sup> parallely from the side e.g. in confined areas

| Article No. | EAN<br>4003773- | <b>↔</b><br>mm |    | Pliers         | Handles                       |             | Applications              | Capacity<br>mm² | AWG        | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|----------------|----|----------------|-------------------------------|-------------|---------------------------|-----------------|------------|------------------------------------|-----------------------|
| 97 53 08    | 040187          | 190            | MM | burni-<br>shed | with multi-component<br>grips | <i>&gt;</i> | End Sleeves<br>(ferrules) | 0.08 - 10       | 28 - 7     | 1                                  | 477                   |
| 97 53 09    | 044550          | 190            | MM | burni-<br>shed | with multi-component<br>grips | 🧀           | End Sleeves<br>(ferrules) | 0.08 - 10 + 16  | 28 - 7 + 5 | 1                                  | 486                   |

# <sup>97</sup> <sup>54</sup> 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 due to toggle lever for fatiguereduced operation

- crimping pliers for other mini plugs as e.g. HD 22, Modu IV, Micro Timer, MQS, ... on request
- Chrome vanadium electric steel in special quality, oil-hardened



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |    | Pliers    | Handles                       |   |       | Applications              | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۍ<br>ع |
|-------------|-----------------|-----------------|----|-----------|-------------------------------|---|-------|---------------------------|-----------------------------|---------|------------------------------------|--------|
| 97 54 24    | 060215          | 190             | MM | burnished | with multi-component<br>grips | ~ | - SAL | D Sub; HD 20;<br>HDE plug | 0.03 - 0.56                 | 32 - 20 | 3                                  | 305    |

42 7 45 4

2 h must i Avers 23.

### <sup>97</sup> Crimping Pliers for end sleeves (ferrules)

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

97 68 145 A **☆1000V 🖄** 

97 62 145 A

8333

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                       | Head     | Handles   |   |          | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|-----------------------|----------|---|---|----------|-----------------------------|---------|------------------------------------|-----------------------|
| 97 61 145 A | 035558          | 145             |                       | polished | plastic coated                                      | T | <i>~</i> | 0.25 - 2.5                  | 23 - 13 | 6                                  | 140                   |
| 97 61 145 F | 043980          | 145             | MM                    | polished | plastic coated                                      | T | <i>~</i> | 0.25 - 2.5                  | 23 - 13 | 6                                  | 140                   |
| 97 62 145 A | 060154          | 145             |                       | polished | with multi-component grips                          |   |          | 0.25 - 2.5                  | 23 - 13 | 6                                  | 170                   |
| 97 68 145 A | 071754          | 145             | <b>≜ 1000 V</b><br>▲€ | polished | insulated with multi-component grips,<br>VDE-tested | ¥ |          | 0.25 - 2.5                  | 23 - 13 | 6                                  | 175                   |

# 97 Crimping Pliers for end sleeves (ferrules)



- for crimping end sleeves (ferrules) according DIN 46228 parts 1 + 4 from 0.25 to 16 mm<sup>2</sup>
- crimping in marked half-round dies for reliable connections between the sleeve and the conductor
- 9 particularly deep dies with conical side faces
- Special tool steel, forged, oil-hardened

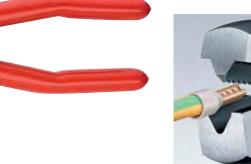


| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm | Head     | Handles                       |   |          | Applications           | Capacity<br>mm <sup>2</sup> | AWG    | Number of<br>crimping<br>positions | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|----------|-------------------------------|---|----------|------------------------|-----------------------------|--------|------------------------------------|-----------------------|
| 97 71 180   | 040668          | 180             | polished | plastic coated                |   | <i>~</i> | End Sleeves (ferrules) | 0.25 - 16.0                 | 23 - 5 | 9                                  | 240                   |
| 97 72 180   | 060185          | 180             | polished | with multi-component<br>grips | U | ø        | End Sleeves (ferrules) | 0.25 - 16.0                 | 23 - 5 | 9                                  | 283                   |

# <sup>97</sup> Crimping Pliers for end sleeves

(ferrules) with front loading

- for crimping end sleeves (ferrules) according DIN 46228 parts 1 + 4 in the range 0.5 to 6.0 mm<sup>2</sup>
- ideal for work in confined areas, e.g. in narrow and deep switch boxes
- Special tool steel, forged, oil-hardened



Number of Article No. Handles EAN Head Applications Capacity mm<sup>2</sup> AWG crimping <--> 52 4003773 positions mm polis- $\mathbf{\overline{v}}$ 97 81 180 019794 180 plastic coated End Sleeves (ferrules) 0.5 - 6.0 20 - 10 227 1 hed



# 97 90 Crimp Assortments for cable connectors







• in a TANOS MINI-systainer<sup>®</sup> (solid plastic box)

- two stackable plastic inserts with 6 trays each for connectors
- with an assortment of standard cable connectors

### 97 90 00

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)



97 90 21





|             |                 |                |           |          | Cable Connectors                         |       |              |        |
|-------------|-----------------|----------------|-----------|----------|--|-------|--------------|--------|
| Article No. | EAN<br>4003773- | Pliers         |           |          |  | Units | Cable<br>mm² | ے<br>م |
|             |                 |                |           |          | Female Sockets 6.0 x 0.8 mm <sup>2</sup> | 25    | 0.5 - 1.0    |        |
|             |                 |                |           | a la     | Female Sockets 6.0 x 0.5 mm <sup>2</sup> | 25    | 1.5 - 2.5    |        |
| 97 90 00    | 025375          | 97 00 215 A    |           | ~        | Female Sockets 8.0 x 0.8 mm <sup>2</sup> | 25    | 1.5 - 2.5    | 1391   |
|             |                 | and the second |           |          | Round Sockets 4.0 mm Ø                   | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Round Pin Plugs 4.0 mm Ø                 | 25    | 1.5 - 2.5    |        |
|             |                 |                |           | <b>U</b> | Cable Connectors, eye type 4.0 mm Ø      | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Cable Connectors, eye type 4.0 mm Ø      | 25    | 1.5 - 2.5    |        |
| 97 90 01    | 025382          | 97 32 225      |           | 3        | Cable Connectors, eye type 5.0 mm Ø      | 25    | 1.5 - 2.5    | 1123   |
| 97 90 01    | 025562          | 97 32 225      |           |          | Cable Connectors, eye type 5.0 mm Ø      | 25    | 4.0 - 6.0    | 1125   |
|             |                 |                |           |          | Cable Connectors, eye type 6.0 mm Ø      | 25    | 4.0 - 6.0    |        |
|             |                 |                |           |          | Insulated Butt Connectors                | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Insulated Butt Connectors                | 25    | 1.5 - 2.5    |        |
|             |                 |                |           | 0        | Female Sockets 6.0 x 0.8 mm <sup>2</sup> | 25    | 0.5 - 1.0    |        |
| 97 90 21    | 062134          | 97 52 36       |           | 64       | Female Sockets 6.0 x 0.5 mm <sup>2</sup> | 25    | 1.5 - 2.5    | 1416   |
|             |                 |                |           |          | Cable Connectors, eye type 4.0 mm Ø      | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Cable Connectors, eye type 5.0 mm Ø      | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Cable Connectors, eye type 5.0 mm Ø      | 20    | 4.0 - 6.0    |        |
|             |                 |                |           | ð        | Cable Connectors, eye type 4.0 mm Ø      | 25    | 1.5 - 2.5    |        |
|             |                 |                |           |          | Cable Connectors, eye type 5.0 mm Ø      | 25    | 1.5 - 2.5    |        |
| 97 90 22    | 062141          | 97 52 36       | 12 42 195 |          | Cable Connectors, eye type 6.0 mm Ø      | 25    | 1.5 - 2.5    | 1527   |
|             |                 |                |           |          | Cable Connectors, eye type 8.0 mm Ø      | 20    | 4.0 - 6.0    |        |
|             |                 |                |           |          | Insulated Butt Connectors                | 25    | 0.5 - 1.0    |        |
|             |                 |                |           |          | Insulated Butt Connectors                | 25    | 1.5 - 2.5    |        |
|             |                 |                |           |          | Insulated Butt Connectors                | 20    | 4.0 - 6.0    |        |

### 97 90 Crimp Assortments for end sleeves (ferrules)



97 90 05



97 90 06

97 90 10

### • in a TANOS MINI-systainer<sup>®</sup> (solid plastic box)

- two stackable plastic inserts with 6 trays each for connectors
- with an assortment of standard cable connectors

### 97 90 05

with Crimping Pliers for end sleeves 97 71 180; end sleeves (ferrules) without collar

**97 90 06** with Crimping Pliers for end sleeves 97 71 180; End Sleeves (ferrules) with collar

**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 90 12







Several boxes can be connected with each other

| Article No. | EAN<br>4003773- | Pliers               |   | 200 x<br>mm²                       | 150 x<br>mm² | 100 x<br>mm² | 75 x<br>mm² | 50 x<br>mm <sup>2</sup> | 40 x<br>mm² | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|----------------------|---|------------------------------------|--------------|--------------|-------------|-------------------------|-------------|-----------------------|
| 97 90 05    | 025535          | 97 71 180            | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 | 4.0 / 6.0    |              |             | 10.0 / 16.0             |             | 930                   |
| 97 90 06    | 025542          | 97 71 180            |   | 0.5 / 0.75 /<br>1.0 / 1.5          | 2.5          |              | 4.0 / 6.0   | 10.0                    | 16.0        | 1000                  |
| 97 90 09    | 028574          | 97 53 04             | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 |              | 4.0 / 6.0    |             | 10.0                    |             | 1420                  |
| 97 90 10    | 046202          | 97 53 04 / 12 40 200 | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 |              | 4.0 / 6.0    |             | 10.0                    |             | 1353                  |
| 97 90 12    | 048916          | 97 53 08 / 12 40 200 | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 |              | 4.0 / 6.0    |             | 10.0                    |             | 1427                  |
| 97 90 23    | 062158          | 97 52 38             | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 |              | 4.0 / 6.0    |             |                         |             | 1226                  |
| 97 90 24    | 062394          | 97 53 08 / 12 42 195 | - | 0.5 / 0.75 /<br>1.0 / 1.5 /<br>2.5 |              | 4.0 / 6.0    |             | 10.0                    |             | 1348                  |



## 97 1 Tool Case for Photovoltaics



- with tools for photovoltaics
- without crimping dies for individual equipment please order separately (see ref. 97 49 ...)
- 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
   external dimensions (W x H x D): 345 x 80 x 280 mm

| Article No.     | EAN<br>4003773- |               |   | Units | ۵ <sup>۲</sup> ۵<br>g |
|-----------------|-----------------|---------------|---|-------|-----------------------|
| 97 91 01        | 070351          | Tool Case for | Photovoltaics   |       | 1964                  |
|                 |                 | 12 12 11      | Precision Insulation Stripper with shaped blades MM                             | 1     |                       |
|                 |                 | 95 16 165     | Cable Shears 👌 1000 V 🖄 🖨 🗘 🐒   | 1     |                       |
|                 |                 | 97 43 200     | Crimp System Pliers MM  | 1     |                       |
| not included (p | lease order s   | eparately):   |   |       |                       |
| 97 49 62        | 063179          | Crimping dies | s for solar cable connectors (Huber + Suhner)                                   |       |                       |
| 97 49 63        | 066675          | Crimping dies | s for solar cable connectors (Huber + Suhner)                                   |       |                       |
| 97 49 65        | 066682          | Crimping dies | s for solar cable connectors MC3 (Multi-Contact)                                |       |                       |
| 97 49 65 1      | 066729          | Locator for 9 | 7 49 65 (solar cable connectors MC3)  |       |                       |
| 97 49 65 2      | 072010          | Mounting Too  | ol for MC3 connectors   |       |                       |
| 97 49 66        | 066699          | Crimping dies | s for solar cable connectors MC4 (Multi-Contact)                                |       |                       |
| 97 49 66 1      | 066736          | Locator for 9 | 7 49 66 (solar cable connectors MC4)  |       |                       |
| 97 49 66 4      | 072096          | Crimping dies | s for solar cable connectors MC4 (Multi-Contact) cutting - stripping - crimping |       |                       |
| 97 49 66 6      | 072102          | Crimping dies | s for solar cable connectors MC4 (Multi-Contact) cutting - stripping - crimping |       |                       |
| 97 49 67        | 066705          | Crimping dies | s for solar cable connectors SunCon (Hirschmann)                                |       |                       |
| 97 49 68        | 066712          | Crimping dies | s for solar cable connectors Solarlok (Tyco)                                    |       |                       |
| 97 49 68 1      | 066743          | Locator for 9 | 7 49 68 solar cable connectors (Solarlok)                                       |       |                       |
| 97 49 69 1      | 072119          | Crimping dies | s for solar cable connectors gesis® PST 40 (Wieland)                            |       |                       |
| 97 49 69 2      | 072126          | Crimping dies | s for solar cable connectors gesis® PST 40 (Wieland)                            |       |                       |
| 97 49 69 11     | 072133          | Locator for 9 | 7 49 69 1 and 97 49 69 2  |       |                       |
| 97 49 59        | 073734          | Crimping dies | s for solar cable connectors Helios H4 (Amphenol)                               |       |                       |

# 97 1 Tool Case for Photovoltaics, MC3 (Multi-Contact)



• the complete tool set to install MC3 connectors

- shock-resistant plastic case
- foam insert 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<br>4003773- |                 |  |                    | Units | ۍلې<br>g |
|-------------|-----------------|-----------------|--|--------------------|-------|----------|
| 97 91 02    | 074083          | Tool Case for I | Photovoltaics, MC3 (Multi-Contact)                           |                    |       | 3280     |
|             |                 | 12 12 11        | Precision Insulation Stripper with shaped blades             | MM                 | 1     |          |
|             |                 | 95 16 165       | Cable Shears   | 🏦 1000 V 🖄 🚭 🤂 🖺 🖫 | 1     |          |
|             |                 | 97 43 200       | Crimp System Pliers  | MM                 | 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 91 02 LE

074090 Tool Case for Photovoltaics, MC3 (Multi-Contact) empty

### **CABLE CONNECTORS**

| 97 |                      |          | 1        |  |                      |      | 1      |                        |         |             |          |
|----|----------------------|----------|----------|--|----------------------|------|--------|------------------------|---------|-------------|----------|
| 99 | Article No.          | EAN      |          | Designation  | Width x<br>Thickness | Plug | Screws | Cable                  | AWG     | Colour      | Quantity |
|    |                      | 4003773- |          |  | mm <sup>2</sup>      | Ømm  | Ømm    | mm <sup>2</sup>        |         |             | <b>L</b> |
|    | 97 99 01             | 025559   |          | Blade Terminal Sockets                                 | 6.3 x 0.8            |      |        | 0.5 - 1.0              | 20 - 17 | red         | 75       |
|    | 97 99 02             | 025566   | 0        | Blade Terminal Sockets                                 | 6.3 x 0.8            |      |        | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 03             | 025573   | (P       | Blade Terminal Sockets                                 | 6.3 x 0.8            |      |        | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 04             | 025580   |          | Blade Terminal Sockets                                 | 8.0 x 0.8            |      |        | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 05             | 025597   |          | Blade Terminal Plugs                                   | 6.3 x 0.8            |      |        | 0.5 - 1.0              | 20 - 17 | red         | 75       |
|    | 97 99 06             | 025603   | 40       | Blade Terminal Plugs                                   | 6.3 x 0.8            |      |        | 1.5 - 2.5              | 15 - 13 | blue        | 75       |
|    | 97 99 07             | 025610   | 0        | Round Sockets  |                      | 4.0  |        | 0.5 - 1.0              | 20 - 17 | red         | 25       |
|    | 97 99 08             | 025627   | •        | Round Sockets  |                      | 5.0  |        | 1.5 - 2.5              | 15 - 13 | blue        | 25       |
|    | 97 99 09             | 025634   |          | Round Pin Plugs  |                      | 4.0  |        | 0.5 - 1.0              | 20 - 17 | red         | 75       |
|    | 97 99 10             | 025641   | Terre    | Round Pin Plugs  |                      | 5.0  |        | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 11             | 025658   | 1        | Flat Pin Accessory Distributors                        | 6.3 x 0.8            |      |        | 0.5 - 1.0              | 20 - 17 | red         | 25       |
|    | 97 99 12             | 025665   | <b>%</b> | Flat Pin Accessory Distributors                        | 6.3 x 0.8            |      |        | 1.5 - 2.5              | 15 - 13 | blue        | 25       |
|    | 97 99 13             | 025672   |          | Cable Connectors, eye type                             |                      |      | 3      | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 14             | 025689   |          | Cable Connectors, eye type                             |                      |      | 4      | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 15             | 025696   |          | Cable Connectors, eye type                             |                      |      | 5      | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 16             | 025702   |          | Cable Connectors, eye type                             |                      |      | 4      | 1.5 - 2.5              | 15 - 13 | blue        | 100      |
|    | 97 99 17             | 025719   |          | Cable Connectors, eye type                             |                      |      | 5      | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 18             | 025726   | ð        | Cable Connectors, eye type                             |                      |      | 6      | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 19             | 025733   |          | Cable Connectors, eye type                             |                      |      | 8      | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 20             | 025740   |          | Cable Connectors, eye type                             |                      |      | 5      | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 21             | 025757   |          | Cable Connectors, eye type                             |                      |      | 6      | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 22             | 025764   |          | Cable Connectors, eye type                             |                      |      | 8      | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 23             | 025771   |          | Cable Connectors, eye type                             |                      |      | 10     | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 24             | 025788   |          | Cable Connectors, forked                               |                      |      | 4      | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 25             | 025795   |          | Cable Connectors, forked                               |                      |      | 4      | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 26             | 025801   |          | Cable Connectors, forked                               |                      |      | 5      | 0.5 - 1.0              | 20 - 17 | red         | 75       |
|    | 97 99 27             | 025818   | 1        | Cable Connectors, forked                               |                      |      | 4      | 1.5 - 2.5              | 15 - 13 | blue        | 75       |
|    | 97 99 28             | 025825   |          | Cable Connectors, forked                               |                      |      | 5      | 1.5 - 2.5              | 15 - 13 | blue        | 50       |
|    | 97 99 29             | 025832   |          | Cable Connectors, forked                               |                      |      | 5      | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 30             | 025849   |          | Cable Connectors, forked                               |                      |      | 6      | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 31             | 025856   |          | Round Pattern Cable Connectors                         |                      |      |        | 0.5 - 1.0              | 20 - 17 | red         | 100      |
|    | 97 99 32             | 025863   | 1        | Round Pattern Cable Connectors                         |                      |      |        | 1.5 - 2.5              | 15 - 13 | blue        | 100      |
|    | 97 99 33             | 025870   |          | Round Pattern Cable Connectors                         |                      |      |        | 4.0 - 6.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 34<br>97 99 35 | 025887   |          | insulated Butt Connectors                              |                      |      |        | 0.5 - 1.0              | 20 - 17 | red<br>blue | 50       |
|    | 97 99 35<br>97 99 36 | 025894   |          | insulated Butt Connectors<br>insulated Butt Connectors |                      |      |        | 1.5 - 2.5<br>4.0 - 6.0 | 15 - 13 |             | 50       |
|    |                      | 025900   |          |  |                      |      |        | 4.0 - 0.0              | 11 - 10 | yellow      | 25       |
|    | 97 99 37             | 025917   | 100      | Two-Way-Sockets  | 6.3 - 0.8            |      |        |                        |         |             | 25       |
|    | 97 99 38             | 025924   | 4        | Piggyback Disconnect                                   | 6.3 - 0.8            |      |        |                        |         |             | 50       |
|    | 97 99 40             | 025931   |          | End Sleeves (ferrules)                                 |                      |      |        | 0.5                    | 20      |             | 200      |
|    | 97 99 41             | 025948   |          | End Sleeves (ferrules)                                 |                      |      |        | 0.75                   | 18      |             | 200      |
|    | 97 99 42             | 025955   |          | End Sleeves (ferrules)                                 |                      |      |        | 1.0                    | 17      |             | 200      |
|    | 97 99 43             | 025962   |          | End Sleeves (ferrules)                                 |                      |      |        | 1.5                    | 15      |             | 200      |
|    | 97 99 44             | 025979   | 2        | End Sleeves (ferrules)                                 |                      |      |        | 2.5                    | 13      |             | 200      |
|    | 97 99 45             | 025986   |          | End Sleeves (ferrules)                                 |                      |      |        | 4.0                    | 11      |             | 150      |
|    | 97 99 46             | 025993   |          | End Sleeves (ferrules)                                 |                      |      |        | 6.0                    | 10      |             | 150      |
|    | 97 99 47             | 026006   |          | End Sleeves (ferrules)                                 |                      |      |        | 10.0                   | 7       |             | 50       |
|    | 97 99 48             | 026013   |          | End Sleeves (ferrules)                                 |                      |      |        | 16.0                   | 5       |             | 50       |
|    | 97 99 49             | 026020   |          | End Sleeves (ferrules)                                 |                      |      |        | 25.0                   | 3       |             | 50       |
|    | 97 99 70             | 024248   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 0.5                    | 20      | white       | 200      |
|    | 97 99 71             | 024255   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 0.75                   | 18      | grey        | 200      |
|    | 97 99 72             | 024262   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 1.0                    | 17      | red         | 200      |
|    | 97 99 73             | 024279   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 1.5                    | 15      | black       | 200      |
|    | 97 99 74             | 024286   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 2.5                    | 13      | blue        | 200      |
|    | 97 99 75             | 026037   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 4.0                    | 11      | grey        | 150      |
|    | 97 99 76             | 026044   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 6.0                    | 10      | yellow      | 150      |
|    | 97 99 77             | 026051   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 10.0                   | 7       | red         | 50       |
|    | 97 99 78             | 026068   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 16.0                   | 5       | blue        | 50       |
|    | 97 99 79             | 026075   |          | End Sleeves (ferrules) with collar                     |                      |      |        | 25.0                   | 3       | yellow      | 50       |
|    | 97 99 92             | 031123   |          | non-insulated Blade Terminal Sockets                   |                      |      |        | 2.8 - 1.5              | 15      |             | 150      |
|    | 97 99 93             | 031130   | - she    | non-insulated Blade Terminal Sockets                   |                      |      |        | 4.8 - 1.5              | 15      |             | 150      |

97 99 95

97 99 96

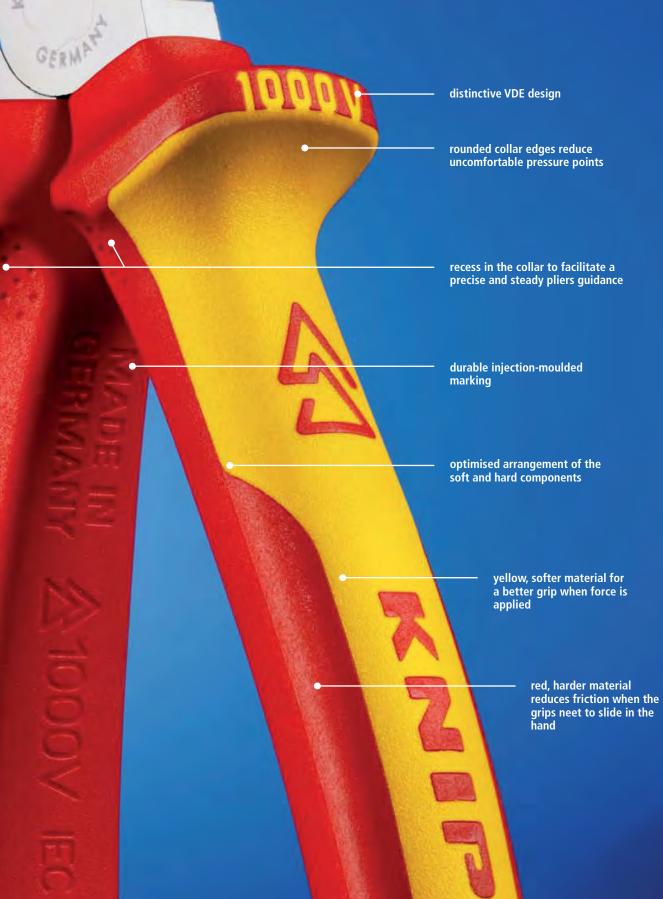
non-insulated Blade Terminal Sockets

non-insulated Blade Terminal Sockets

6.3 - 1.5 15

6.3 - 2.5 13

## **VDE PLIERS HANDLES:** IMPROVED COMFORT DESIGN.



# **INSULATED TOOLS**

Work on electrical installations is subject to the special protection tasks of authorities and insurance companies. This resulted in the creation of diverse national and international safety standards (e.g. in Germany the VDE 0105 and BGR A3, internationally EN 50110 or IEC 60364). Only a qualified electrician who respects and follows these regulations is permitted to carry out work on electrical installations (including live working). He has to use special tools for this particular work that have been specifically made for this kind of work and have been thoroughly tested.

KNIPEX insulated tools are made of high-quality materials, which have been manufactured and tested in conformance with the regulations of national and international standards. If the prescribed method for working on electrical installations (see above), are observed, these tools offer the greatest possible protection even when it is necessary to work live up to AC 1000 V (alternating current) and DC 1500 V (direct current).

Since 1987 the IEC 60900 has specified worldwide requirements for tools for live working, while DIN EN 60900 made these mandatory for the EU countries as from 1995. Tests on KNIPEX tools which bear the special mark  $\triangleq$  1000 V include subjecting them to routine tests with 10,000 volts to check their dielectric strength. This gives the user a considerable buffer of additional protection even if work on electrical installations needs to be performed live.

The mark  $\triangleq 1000 V$  identifies KNIPEX insulated tools as being suitable for live working. The specified standard also shows the requirements our claim can be measured against. The manufacturer name KNIPEX on the insulation indicates that we accept responsibility for the correctness of this information. The marks prove: The observation of these requirements is monitored not only by the KNIPEX quality assurance team but also e.g. by VDE (Association of German Electricians).

Because the purchase of insulated hand tools is a matter of trust.



Type examination, manufacturing inspections and stock monitoring by the neutral VDE testing centre.

### COVER INSULATION (VERSION 6)

KNIPEX pliers with the two-colour multi-component handle cover insulation meet the requirements of VDE 0682 Part 201 and corresponding international standards (e.g. EN 60900 or IEC 60900). This claim is confirmed by the VDE/GS mark awarded by an obligatorily neutral inspection body.



The slip guard is designed so that the hand cannot slip unintentionally on conductive metal parts on the head of the pliers.

### DIPPED INSULATION (VERSION 7)

Other hand tools such as open ended spanners/ single ended box wrenches, socket wrenches, ratchets etc. are insulated at KNIPEX using a plastic dipping method. These also meet all requirements of the VDE standard and corresponding international standards (such as IEC 60900 or DIN EN 60900). To round off this range, KNIPEX also insulates pliers in a dipping process to adapt these tools concerning appearance and production method to the other dipped insulated tools. These pliers also bear the VDE/GS mark.



The firmly bonded double dipped insulation is made of insulating material which is free of harmful substances and more than 1 mm thick at each point. Extra thick insulation at the ends of the handles. This prevents cracks following an impact.

### 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.

# KNIPEX INSULATED TOOLS – 100 % TESTED, ONE BY ONE





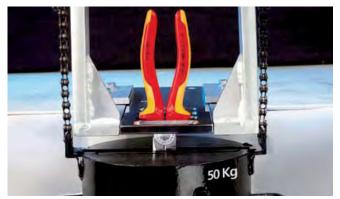
### **Testing dielectric strength**

Each KNIPEX  $\bigstar$  1000V insulated tool has been tested individually. This individual testing is done with a test voltage of AC 10,000 volts. This test load, which is 10 times as high as the maximum permitted voltage during work, inspires the user to trust a reliable insulation when live working.



### Testing low temperature impact strength

The tools are cooled down to -25°C. The insulation material must retain the toughness necessary to ensure that it does not break when hit or knocked.



Testing the adhesion of the insulating coating

The adhesion of the insulation coating is tested after storage of 168 hours at 70°C. In case of pliers a tensile load of 500 N is applied. The insulating material must remain firmly bonded to the basic tool.



**Testing burning behaviour** KNIPEX uses only flame-resistant and self-extinguishing plastics for insulation.



### **Testing electrical insulation**

After submersion in water for 24 hours, the tools are tested with AC 10,000 V for 3 minutes including measuring of the leakage current. The reading of the leakage current must stay below the limits defined in the standards.



**Testing indentation resistance** 

The insulation heated to 70°C must prove under standardised test conditions that the warm plastic has sufficient mechanical strength to resist expected loads.

### Combination Pliers Chrome Vanadium

DIN ISO 5746 IEC 60900 DIN EN 60900



- 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

- 35 % saving in power due to improved lever action compared with

• with cutting edges (hardness approx. 63 HRC) for soft and hard wire

• with gripping zones for flat and round material, suitable for

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

conventional combination pliers

and piano wire

versatile use

easier work due to optimised leverage

Iong cutting edges for thicker cables

Chrome vanadium heavy-duty steel, forged, oil-hardened

|             |                    |     |                             | Diarr             |                                       | (       | Cutting c | apacities |                 |     |
|-------------|--------------------|-----|-----------------------------|-------------------|---------------------------------------|---------|-----------|-----------|-----------------|-----|
| Article No. | EAN ←→ 4003773- mm |     | Pliers                      | Handles           |                                       | $\circ$ |           |           | <u>2</u> 2      |     |
|             | 4003773-           | mm  |                             |                   |                                       | Ømm     | Ømm       |           | mm <sup>2</sup> | g   |
| 01 06 160   | 040729             | 160 | A 1000 V 🔊 🍜 🎹 🚺            | chrome            | insulated with multi-component grips, | 2.0     | 1.5       | 10.0      | 16.0            | 220 |
| 01 06 190   | 040415             | 190 | ↔ 1000 V //// 🛋 🖽 🖽 👘 👘 👘 👘 | plated VDE-tested | VDE-tested                            | 2.5     | 2.0       | 13.0      | 25.0            | 320 |

01

### **High Leverage Combination Pliers**

DIN ISO 5746 IEC 60900 DIN EN 60900



£1000V @€ আ∭

|             |          |            |                  |                  |   |     | Cutting c | apacities |      |     |
|-------------|----------|------------|------------------|------------------|---|-----|-----------|-----------|------|-----|
| Article No. | EAN      | <b>∢</b> → |                  | Pliers           | Handles   |     |           |           |      | 52  |
|             | 4003773- | mm         |                  |                  |   | Ømm | Ømm       | Ømm       | mm²  | g   |
| 02 06 180   | 010012   | 180        |                  | 1                |   | 2.5 | 2.0       | 11.5      | 16.0 | 247 |
| 02 06 200   | 010029   | 200        | £ 1000 V 🖄 🚰 💷 🕨 | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 2.8 | 2.2       | 13.0      | 25.0 | 343 |
| 02 06 225   | 010036   | 225        |                  | plateu           |   | 3.0 | 2.5       | 14.0      | 25.0 | 401 |
| 02 07 200   | 022299   | 200        | A 1000V @ 🛋 🛲 🚺  | chrome           | with dipped insulation, VDE-tested                  | 2.8 | 2.2       | 13.0      | 25.0 | 380 |
| 02 07 225   | 022305   | 225        |                  | plated           | with dipped insulation, vDE-tested                  | 3.0 | 2.5       | 14.0      | 25.0 | 486 |



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, oil-hardened

|             |          |            |   |                  |   |     | Cutting o | apacities | ;               |     |
|-------------|----------|------------|---|------------------|---|-----|-----------|-----------|-----------------|-----|
| Article No. | EAN      | <b>∢</b> > |   | Pliers           | Handles   |     |           | <b>⊗</b>  |                 | 52  |
|             | 4003773- | mm         |   |                  |   | Ømm | Ømm       | Ømm       | mm <sup>2</sup> | g   |
| 03 06 160   | 021902   | 160        |   |                  |   | 3.1 | 2.0       | 10.0      | 16.0            | 228 |
| 03 06 180   | 021926   | 180        | 🛧 1000 V 🖄 🚭 💷 🚺 ►                                  | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 3.4 | 2.2       | 12.0      | 16.0            | 264 |
| 03 06 200   | 033776   | 200        |   | plateu           |   | 3.8 | 2.5       | 13.0      | 16.0            | 326 |
| 03 07 160   | 015307   | 160        |   |                  |   | 3.1 | 2.0       | 10.0      | 16.0            | 254 |
| 03 07 180   | 015314   | 180        | A 1000 V 🖉 🛋 🛲 🕅                                    | chrome           | with dipped insulation, VDE-tested                  | 3.4 | 2.2       | 12.0      | 16.0            | 285 |
| 03 07 200   | 015321   | 200        | ▲ 1000 V (2000 V (2000 Pla) ▲ 1000 V (2000 Pla) Chr | plated           | with dipped insulation, vDE-tested                  | 3.8 | 2.5       | 13.0      | 16.0            | 339 |
| 03 07 250   | 015345   | 250        |   |                  |   | 3.8 | 2.5       | 15.0      | 25.0            | 597 |

### 11

03 07 200

A 1000 V 🖄 🗗 💷 🕨 🖊

Insulation Strippers IEC 60900 DIN EN 60900

- 11 06 160 £1000V @€ MM
  - 11 07 160 £1000V @€ MM
  - Stripping capacities Ø mm Stripping capacities mm<sup>2</sup> Article No. EAN Pliers Handles AWG 5 **∢**--> 4003773mm q insulated with multi-component grips, chrome 11 06 160 021933 160 £ 1000 V @ € MM 5.0 10.0 7 166 VDE-tested plated chrome 11 07 160 015499 160 £ 1000 V @ € MM with dipped insulation, VDE-tested 5.0 10.0 7 180 plated chrome <u></u> £ 1000 V @ € 11 17 160 015505 160 with dipped insulation, VDE-tested 5.0 10.0 7 181 plated

- for single, multiple and fine stranded conductors with plastic or rubber insulation max. 5.0 mm dia. or resp. 10.0 mm<sup>2</sup> 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





### Diagonal Insulation Stripper

IEC 60900 DIN EN 60900



- the essential pliers for electrical installation work
- precision stripping holes for single (solid) conductors of 1.5 and 2.5 mm<sup>2</sup>
- induction hardened precision blades for soft wire up to 4.0 mm dia., cutting edge hardness approx. 60 HRC
- Vanadium electric steel; forged, oil-hardened



Multi-functional: cutting and stripping

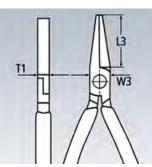
| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |               | Pliers           | Handles   | Stripping<br>capacities<br>mm <sup>2</sup> | AWG     | Cutting c<br>Ø mm | apacities<br>D<br>Ø mm | ۲<br>ع |
|-------------|-----------------|-----------------|---------------|------------------|---|--|---------|-------------------|------------------------|--------|
| 14 26 160   | 040279          | 160             | 桧 1000 V 逊🗗 🦯 | chrome<br>plated | insulated with multi-compo-<br>nent grips, VDE-tested | 1.5 + 2.5                                  | 15 + 13 | 2.5               | 1.5                    | 216    |

### Flat Nose Pliers

DIN ISO 5745 IEC 60900 DIN EN 60900

- short, flat jaws
- serrated gripping surfaces
- Chrome vanadium electric steel, forged, oil-hardened

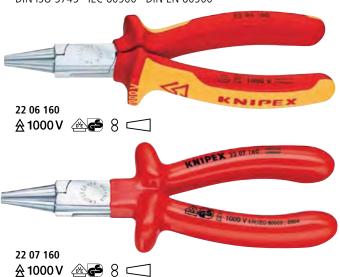




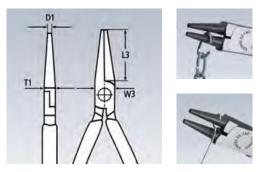
| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                  | Pliers           | Handles   | D<br>L3<br>mm | imension<br>W3<br>mm | ns<br>T1<br>mm | ۲۵<br>g |  |
|-------------|-----------------|-----------------|------------------|------------------|---|---------------|----------------------|----------------|---------|--|
| 20 06 160   | 033783          | 160             | £ 1000 V എ€ 🔜 আ∭ | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 30.0          | 17.0                 | 9.5            | 176     |  |

### 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



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                       | Pliers           | Handles   | L3<br>mm | Dimer<br>W3<br>mm | nsions<br>D1<br>mm | T1<br>mm | ۲<br>g |
|-------------|-----------------|-----------------|-----------------------|------------------|---|----------|-------------------|--------------------|----------|--------|
| 22 06 160   | 033790          | 160             | <b>≵1000 V @€</b> 8 < | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 30.0     | 18.0              | 3.0                | 9.5      | 175    |
| 22 07 160   | 015901          | 160             | <b>≜1000V @€</b> 8⊂   | chrome<br>plated | with dipped insulation, VDE-tested                  | 30.0     | 18.0              | 3.0                | 9.5      | 196    |

### 25

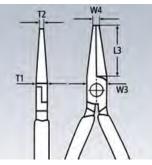
### **Snipe Nose Side Cutting Pliers**

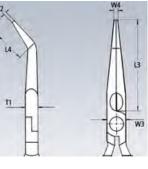
### (Radio Pliers)



- pointed, half-round jaws
  - serrated gripping surfaces
  - with cutting edges for medium hard and hard wire
  - cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC
  - Vanadium electric steel; forged, oil-hardened

suitable for finer gripping and cutting work





| Article No |             | AN<br>003773- | <b>∢→</b><br>mm |  | Pliers           | Handles   | Cutting ca<br>D<br>Ø mm | apacities<br>①<br>Ø mm | L3<br>mm | L4<br>mm | Dimer<br>W3<br>mm | nsions<br>T1<br>mm | W4<br>mm | T2<br>mm | ۲۵<br>g |
|------------|-------------|---------------|-----------------|--|------------------|---|-------------------------|------------------------|----------|----------|-------------------|--------------------|----------|----------|---------|
| 25 06 16   | <b>0</b> 03 | 33806         | 160             | A 1000 V A 1000 V A 4 1000 V           | chrome<br>plated | insulated with multi-com-<br>ponent grips, VDE-tested | 2.5                     | 1.6                    | 50.0     |          | 16.5              | 9.0                | 3.0      | 2.5      | 146     |
| 25 26 16   | <b>0</b> 05 | 52111         | 160             | <b>À 1000 V</b><br>ଜ≧ ≰40°<br>⊖ আ∭ ► ◄ | chrome<br>plated | insulated with multi-com-<br>ponent grips, VDE-tested | 2.5                     | 1.6                    | 50.0     | 23.0     | 16.5              | 9.0                | 3.0      | 2.5      | 144     |

DIN ISO 5745 IEC 60900 DIN EN 60900

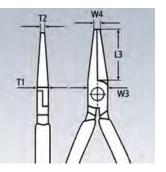
### 26 **Snipe Nose Side Cutting Pliers**

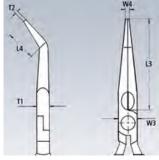
### (Stork Beak Pliers)

DIN ISO 5745 IEC 60900 DIN EN 60900



- high loadable, elastic precision points
- half-round, long jaws
- serrated gripping surfaces
- with cutting edges for medium hard wire max. dia. 3.2 mm and hard wire max. dia. 2.2 mm
- cutting edges additionally induction hardened, cutting edge hardness approx. 61 HRC
- Vanadium electric steel; forged, oil-hardened





| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                                     | Pliers           | Handles   | Cutting c<br>D<br>Ø mm | apacities<br>Ø mm | L3<br>mm | L4<br>mm | Dimer<br>T1<br>mm | nsions<br>W3<br>mm | W4<br>mm | T2<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|-------------------------------------|------------------|---|------------------------|-------------------|----------|----------|-------------------|--------------------|----------|----------|-----------------------|
| 26 16 200   | 022831          | 200             | <u> </u>                            | chrome<br>plated | insulated with multi-com-<br>ponent grips, VDE-tested | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5               | 3.0      | 2.5      | 206                   |
| 26 17 200   | 016069          | 200             | 8 1000 V @ €<br>⊖ = ■ ■ ●           | chrome<br>plated | with dipped insulation,<br>VDE-tested                 | 3.2                    | 2.2               | 73.0     |          | 9.5               | 17.5               | 3.0      | 2.5      | 212                   |
| 26 26 200   | 022855          | 200             | £ 1000 V @ בּ<br>∡40° ⊖ שעע<br>וויי | chrome<br>plated | insulated with multi-com-<br>ponent grips, VDE-tested | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5               | 3.0      | 2.5      | 204                   |
| 26 27 200   | 016090          | 200             | ★1000 V ▲ ★40° ⊖                    | chrome<br>plated | with dipped insulation,<br>VDE-tested                 | 3.2                    | 2.2               | 73.0     | 23.0     | 9.5               | 17.5               | 3.0      | 2.5      | 220                   |

### 30

### **Long Nose Pliers**

DIN ISO 5745 IEC 60900 DIN EN 60900 30 16 160 

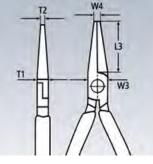
heavy duty and wear resisting

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



52 α

150

141

| Article No. | EAN<br>4003773- | <b>∢-→</b><br>mm |                       | Style | Pliers           | Handles   | L3<br>mm | Di<br>W3<br>mm | mensio<br>T1<br>mm | ns<br>W4<br>mm | T2<br>mm |
|-------------|-----------------|------------------|-----------------------|-------|------------------|---|----------|----------------|--------------------|----------------|----------|
| 30 16 160   | 001904          | 160              | ≙ 1000 V 🖄 🖨 🔚 💷      | 1     | chrome<br>plated | insulated with multi-compo-<br>nent grips, VDE-tested | 46.5     | 16.5           | 9.5                | 3.0            | 5.0      |
| 30 36 160   | 002123          | 160              | <b>☆1000 V @€</b> 8 < | 3     | chrome<br>plated | insulated with multi-compo-<br>nent grips, VDE-tested | 41.0     | 16.5           | 9.5                | 5.0            | 2.5      |

30 36 160

**≙1000V @€** 8 ⊂

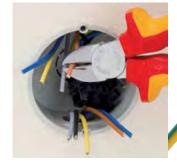
### **Diagonal Cutters**

70

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
- precision cutting edges additionally induction hardened, cutting edge hardness approx. 62 HRC
- narrow head style for use in confined areas
- Vanadium electric steel; forged, oil-hardened



Slim head style and precise cut at blade tips: Advantageous when working in confined areas

|             |                          |          |                         |                                    |  | Cutt | ing capa | cities |     |
|-------------|--------------------------|----------|-------------------------|------------------------------------|--|------|----------|--------|-----|
| Article No. | EAN                      | <b>-</b> |                         | Pliers                             | Handles  |      |          |        | 5   |
|             | 4003773-                 | mm       |                         |                                    |  | Ømm  | Ømm      | Ø mm   | g   |
| 70 06 125   | 018124                   | 125      |                         |                                    |  | 3.0  | 2.3      | 1.5    | 121 |
| 70 06 140   | 040293                   | 140      | ☆ 1000 V 🖄 🛃 ▶          | chrome                             | inculated with multi-component grins VDE tested  | 4.0  | 2.5      | 1.8    | 160 |
| 70 06 160   | <b>0 06 160</b> 021995 1 | 5 160    |                         | plated                             | insulated with multi-component grips, VDE-tested | 4.0  | 2.8      | 2.0    | 216 |
| 70 06 180   | 033813                   | 180      |                         |                                    |  | 4.0  | 3.0      | 2.5    | 254 |
| 70 07 160   | 018155                   | 160      |                         | chrome                             | with dispad inculation VDE tested                | 4.0  | 2.8      | 2.0    | 227 |
| 70 07 180   | 018179                   | 180      | A 1000 V AGE ► Informet | with dipped insulation, VDE-tested | 4.0  | 3.0  | 2.5      | 269    |     |
| 70 26 160   | 018223                   | 160      | £ 1000 V 🏝 🗲 🦰          | chrome<br>plated                   | insulated with multi-component grips, VDE-tested | 4.0  | 2.8      | 1.8    | 216 |

74

### High Leverage Diagonal Cutters

DIN ISO 5749 IEC 60900 DIN EN 60900



### **20 % less effort required** compared to conventional diagonal cutters of the same length.

With integrated forged joint axle.

with forged-in axle for heaviest duty

- suitable for all types of wire including piano wire
- high cutting performance with minimum effort due to optimum coordination of the cutting edge angle, transmission ratio and ergonomic handle shape
- precision cutting edges additionally induction-hardened, cutting edge hardness approx. 64 HRC
- Chrome vanadium heavy-duty steel, forged, oil-hardened

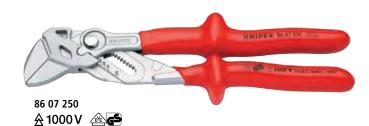
74 07 200 À 1000 V ♠

| Article No. | EAN<br>4003773- | <b>-</b> > |                | Pliers                                    | Handles  |     | ng capao | $\circ$ | ۵۵  |
|-------------|-----------------|------------|----------------|---|--|-----|----------|---------|-----|
|             |                 | mm         |                |   |  | Ømm | Ømm      | Ømm     | g   |
| 74 06 160   | 040705          | 160        |                |   |  | 3.4 | 2.5      | 2.0     | 215 |
| 74 06 180   | 022985          | 180        | ☆ 1000 V ④ ●   | chrome                                    | insulated with multi-component grips, VDE-tested | 3.8 | 2.7      | 2.2     | 280 |
| 74 06 200   | 033820          | 200        |                | plated                                    |  | 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 1000 V @ 🛋 🍋 | chrome                                    | with dispad inculation VDE tested                | 4.2 | 3.0      | 2.5     | 328 |
| 74 07 250   | 018421          | 250        | <u> </u>       | plated with dipped insulation, VDE-tested |  | 4.6 | 3.5      | 3.0     | 510 |

### <sup>86</sup> <sup>07</sup> Pliers Wrench insulated

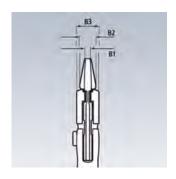
IEC 60900 DIN EN 60900

### PATENTED



- pliers and 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 allow infinitely variable gripping of all widths 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

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                   | Pliers           | Handles                               | Inch  |    | Adjustment<br>positions | D<br>B1<br>mm | imensior<br>B2<br>mm | ns<br>B3<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-------------------|------------------|---------------------------------------|-------|----|-------------------------|---------------|----------------------|----------------|---------|
| 86 07 250   | 065067          | 250             | <b>会1000V @</b> € | nickel<br>plated | with dipped insulation,<br>VDE-tested | 1 3/4 | 46 | 17                      | 8.0           | 8                    | 14             | 615     |

### 88

### KNIPEX Alligator<sup>®</sup> Water Pump Pliers

DIN ISO 8976 IEC 60900 DIN EN 60900



- box-joint design: high stability because of double guide
- self-locking on pipes and nuts: no slipping on the workpiece and low hand force required
- guard prevents operators' fingers being pinched
- favourable lever action: optimum transmission of force
- gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and stable gripping
- Chrome vanadium electric steel, forged, oil-hardened



Length 250 mm

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

| Arti | icle No. | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Pliers           | Handles   | O⊒<br>Ø Inch | O]<br>Ømm |    | Adjustment<br>positions | ۲۵<br>g |
|------|----------|-----------------|-----------------|---------------------|------------------|---|--------------|-----------|----|-------------------------|---------|
| 88   | 06 250   | 039303          | 250             | â 1000 V இச் আ∭ (⊂) | chrome<br>plated | insulated with multi-com-<br>ponent grips, VDE-tested | 2            | 50        | 46 | 9                       | 374     |
| 88   | 07 250   | 019343          | 250             | â 1000 V @₽ আ∭ ⊆    | chrome           | with dipped insulation,                               | 2            | 50        | 46 | 9                       | 420     |
| 88   | 07 300   | 022350          | 300             |                     | plated           | VDE-tested  | 2 3/4        | 70        | 60 | 9                       | 661     |

## <sup>87</sup><sub>26</sub> KNIPEX Cobra<sup>®</sup> VDE

### Hightech Water Pump Pliers, insulated

DIN ISO 8976 IEC 60900 DIN EN 60900

### (PATENTED)





Quick setting without using a push-button

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!

- adjustment by shifting one jaw directly on to the workpiece: fast, reliable and comfortable handling
- opening at the touch of a button off the workpiece
- fine adjustment to fit very different workpiece sizes with a comfortable handle position
- 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 hand force required
- gripping surfaces with special hardened teeth, teeth hardness approx. 61 HRC: low wear and reliable gripping

- box-joint design: high stability because of double guide
- guard prevents operators' fingers being pinched
- Chrome vanadium electric steel, forged, oil-hardened

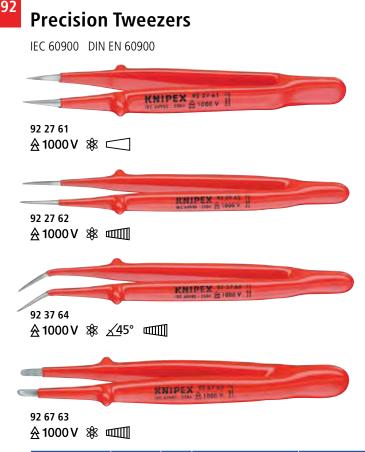


Just push the pliers handle to adjust!





| Article No. | EAN<br>4003773- | <b>⊶→</b><br>mm |                 | Pliers           | Handles   | O]<br>Ø Inch |    |    | Adjustment<br>positions | ۲ <sub></sub> ک<br>ع |
|-------------|-----------------|-----------------|-----------------|------------------|---|--------------|----|----|-------------------------|----------------------|
| 87 26 250   | 071495          | 250             | 1000 V இ€ আ∭ [] | chrome<br>plated | insulated with multi-compo-<br>nent grips, VDE-tested | 2            | 50 | 46 | 24                      | 340                  |



| <u>A</u> 1000V ﷺ ⊓ |                 |     |                  |                        |    |
|--------------------|-----------------|-----|------------------|------------------------|----|
| Article No.        | EAN<br>4003773- |     |                  | Finish                 | 52 |
|                    | 4003773         | mm  |                  |                        | g  |
| 92 27 61           | 054757          | 130 | <b>≜1000V</b> ⊂  | with dipped insulation | 32 |
| 92 27 62           | 054764          | 150 | ≙ 1000 V  আ∭     | with dipped insulation | 35 |
| 92 37 64           | 054856          | 150 | ≙ 1000 V  ∡45° আ | with dipped insulation | 34 |
| 92 67 63           | 054931          | 145 | ≙ 1000 V  আ∭     | with dipped insulation | 43 |





£1000V @€ 😵 🐒

- for cutting copper and aluminium cables
- not suitable for steel wire and hard drawn copper conductors
- precision ground, hardened blades

tested according IEC 60900 : 2004

for ultra fine mounting work; extra fine tips; straight pattern; gripping surfaces matt

straight pattern; gripping surfaces with fine transverse serration

angled tips; gripping surfaces with fine transverse serration

straight pattern; serrated gripping surfaces

with dipped insulation

finished for optimum grip

Spring steel, high-strength

nickel plated

92 27 61

92 27 62

92 37 64

92 67 63

- 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 06 230

for copper single conductors up to 16 mm<sup>2</sup>, multiple stranded wires up to 50 mm<sup>2</sup>, fine stranded up to 70 mm<sup>2</sup> and aluminium conductors multiple stranded wires up to 70 mm<sup>2</sup>; easy cutting with one-hand operation due to high transmission ratio; stainless – special grade – steel, oil-hardened and tempered

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                    | Head     | Handles                       | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | AWG | ۲ <sub>۲</sub><br>g |
|-------------|-----------------|-----------------|--------------------|----------|-------------------------------|-------------------|------------------------------|-----|---------------------|
| 95 06 230   | 006305          | 230             | £ 1000 V 🏝 🚭 🗣 🖺 💃 | polished | plastic insulated, VDE-tested | 16                | 50                           | 1/0 | 274                 |

### <sup>95</sup> <sup>1</sup> Cable Shears

IEC 60900 DIN EN 60900



95 26 165 ▲ 1000V @@ ♥ ♥ ♥ ★ MMA



multiple stranded cables

Style 2

precision ground, hardened blades

internal opening spring, protected and captive

• for cutting copper and aluminium single conductors as well as

• not suitable for steel wire and hard drawn copper conductors

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

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



Cut effected with a Cable Shear: easy, clean cut without any deformation of the cable



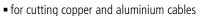
| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                   | Tool             | Handles   | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | AWG | ۲<br>g |
|-------------|-----------------|-----------------|-------------------|------------------|---|-------------------|------------------------------|-----|--------|
| 95 16 165   | 039648          | 165             | ☆1000 V 🖄 🖨 🤁 🖺 🐒 | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 15                | 50                           | 1/0 | 262    |
| 95 26 165   | 069980          | 165             | 1000 V 🏝 🖨 🔁 KWK  | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 15                | 50                           | 1/0 | 275    |

### <sup>95</sup> Cable Shears with twin cutting edge

IEC 60900 DIN EN 60900

### PATENTED





- 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
- initial and final cut (upper and lower blade) allows cables of up to 20 mm dia. to be cut
- low hand force required due to favourable lever ratio and new blade 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 cut is finished through the metal part of the cable in the rear profile. Initial cut in the front profile, final cut in the rear profile - to keep it as easy as possible.

| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |                  | Ttool            | Handles   | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | AWG | ۲<br>ع |
|-------------|-----------------|------------------|------------------|------------------|---|-------------------|------------------------------|-----|--------|
| 95 16 200   | 026761          | 200              | A 1000 V 🖄 🚭 🤂 🛒 | chrome<br>plated | insulated with multi-component grips,<br>VDE-tested | 20                | 70                           | 2/0 | 340    |
| 95 17 200   | 026952          | 200              | £ 1000 V 🏤 🚭 🕃 🐒 | chrome<br>plated | with dipped insulation, VDE-tested                  | 20                | 70                           | 2/0 | 360    |



- 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
- Iow 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<sup>2</sup>

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                    | Head     | Handles                            | Cutting c | apacities | AWG   | ۲<br>م |
|-------------|-----------------|-----------------|--------------------|----------|------------------------------------|-----------|-----------|-------|--------|
|             | 006705          |                 |                    |          |                                    |           |           | 5 / 0 | 9      |
| 95 17 500   | 026785          | 500             | 🏦 1000 V 🖄 😭 🔂 🖺 🕤 | polished | with dipped insulation, VDE-tested | 27        | 150       | 5/0   | 1477   |



- for cutting copper and aluminium single conductors as well

- favourable lever ratio due to toggle lever
- quard prevents operators' fingers being pinched
- Blade head: high-grade chrome vanadium electric steel, forged,

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                               | Head      | Handles                            | Cutting c<br>Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | AWG | ۲۵<br>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 / 9 | 95 27 600 |                                    |                                |                              |     |         |

### <sup>95</sup> Cable Cutters ratchet action

£1000V @ € \$ MM 15

IEC 60900 DIN EN 60900

#### PATENTED

95 36 280



 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 hand force 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

#### 95 36 280

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



Ratchet principle and two-stage ratchet drive for easier cutting

| , | Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                                  | Tool            | Handles  | Cutting c<br>Ø mm | apacities<br>mm <sup>2</sup> | МСМ | ۵ <sup>۲</sup> ۵<br>g |
|---|-------------|-----------------|-----------------|----------------------------------|-----------------|--|-------------------|------------------------------|-----|-----------------------|
| 9 | 95 36 250   | 026884          | 250             | 1000 V 🖄 🚭 🤂 MM 🖭                | black lacquered | insulated with multi-component grips, VDE-tested | 32                | 240                          | 500 | 652                   |
| 9 | 95 36 280   | 026891          | 280             | ≙ 1000 V 🖄 🚭 🤂 MM 🖭              | black lacquered | insulated with multi-component grips, VDE-tested | 52                | 380                          | 750 | 835                   |
|   |             |                 |                 |                                  |                 |  |                   |                              |     |                       |
| 9 | 95 39 250   | 022244          | Movab           | le spare blade for 95 31 250 / 9 | 95 36 250       |  |                   |                              |     |                       |
| 9 | 95 39 280   | 025283          | Movab           | le spare blade for 95 31 280 / 9 | 95 36 280       |  |                   |                              |     |                       |

**95** 

### 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
- high-strength aluminium handles
- Iow weight

- Cutter head: high-grade special tool steel, oil-hardened
- Handles: aluminium, highstrength



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                               | Head     | Handles                | Cutt<br>mm <sup>2</sup> | ing capa<br>Ø mm | cities<br>D<br>Ø mm | AWG | ۲۵<br>g |
|-------------|-----------------|-----------------|-------------------------------|----------|------------------------|-------------------------|------------------|---------------------|-----|---------|
| 95 77 600   | 025313          | 600             | A 1000 V 🔂 🛞 📲 👅              | polished | with dipped insulation | 150                     | 14.0             | 9.0                 | 5/0 | 2359    |
|             |                 |                 |                               |          |                        |                         |                  |                     |     |         |
| 95 79 600   | 025337          | Spare           | cutter head for 95 71 600 / 9 | 5 77 600 |                        |                         |                  |                     |     |         |



# 97 68 Crimping Pliers for end sleeves (ferrules)

IEC 60900 DIN EN 60900



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

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |          |          | Head     | Handles   | Capacity<br>mm <sup>2</sup> | AWG     | Number of<br>crimping<br>positions | ۲٦<br>g |
|-------------|-----------------|-----------------|----------|----------|----------|---|-----------------------------|---------|------------------------------------|---------|
| 97 68 145 A | 071754          | 145             | <u> </u> | <i>i</i> | polished | insulated with multi-component grips,<br>VDE-tested | 0.25 - 2.5                  | 23 - 13 | 6                                  | 175     |

# <sup>98</sup> Open End Wrenches

IEC 60900 DIN EN 60900

### ■ jaw 15° angled

- basic tool chrome plated
- Chrome vanadium steel, forged, oil-hardened



| Article No.   | EAN<br>4003773- |                           | Width across flats S<br>mm | Width across flats S<br>Inch | Length l<br>max. mm | Head width b<br>max. mm | Head thickness a<br>max. mm | ۲۵<br>g |
|---------------|-----------------|---------------------------|----------------------------|------------------------------|---------------------|-------------------------|-----------------------------|---------|
| 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          |                           | 18.0                       |                              | 160.0               | 44.0                    | 8.0                         | 149     |
| 98 00 19      | 019992          | <u></u> £ 1000 V <b>○</b> | 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 00 1 1/16" | 019855          |                           |                            | 1 1/16                       | 215.0               | 63.0                    | 9.0                         | 400     |

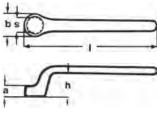
# Box Wrenches

IEC 60900 DIN EN 60900

### cranked

- basic tool chrome platedChrome vanadium steel, forged, oil-hardened





| Article No. | EAN<br>4003773- |          | Width across flats S<br>mm | Length l<br>max. mm       | Head width b<br>max. mm | Head thickness a max. mm  | Depth of crank h<br>max. mm | ۲۵<br>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          | <u> </u> | <u> </u>                   | 13.0                      | 185.0                   | 21.5                      | 11.0                        | 23.0    | 125   |      |      |      |       |      |      |      |     |  |      |       |      |      |      |     |
| 98 01 14    | 020240          |          |                            | <u></u> £ 1000 V <b>O</b> | <u></u>                 | <u></u> £ 1000 V <b>O</b> | <b>≙1000 V O</b>            | 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 | 268 |  |      |       |      |      |      |     |
| 98 01 24    | 020318          |          | 24.0                       | 265.0                     | 38.0                    | 16.0                      | 30.0                        | 961     |       |      |      |      |       |      |      |      |     |  |      |       |      |      |      |     |

### 98 Nut Drivers with screwdriver handle

IEC 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<br>4003773- | <b>←→</b><br>mm |                 | Tip       | Handle            | Width across<br>flats S<br>mm | Blade length<br>mm | Handle<br>length<br>mm | Head dia.<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------|-----------|-------------------|-------------------------------|--------------------|------------------------|-----------------|---------|
| 98 03 04    | 071679          | 230             |                 |           |                   | 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             | <b>A 1000 V</b> |           | insulating multi- | 7.0                           | 125.0              | 112                    | 14.0            | 123     |
| 98 03 08    | 024095          | 237             | <u>a</u>        | burnished | component handle, | 8.0                           | 125.0              | 112                    | 15.0            | 125     |
| 98 03 09    | 026112          | 237             | 0               |           | VDE-tested        | 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** 0



98 05 13 会1000 V @ @ ● O





| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm |                       | Width across flats S<br>mm | Handle length max.<br>mm | Head dia.<br>mm | ۲۵<br>g |
|-------------|-----------------|------------------|-----------------------|----------------------------|--------------------------|-----------------|---------|
| 98 04 08    | 071341          | 200              |                       | 8.0                        | 90                       | 15.0            | 344     |
| 98 04 10    | 026167          | 200              | £ 1000 V @ <b>€ ○</b> | 10.0                       | 155                      | 19.5            | 324     |
| 98 04 13    | 026198          | 200              |                       | 13.0                       | 155                      | 23.5            | 344     |
| 98 04 17    | 026211          | 200              |                       | 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              | <u>A</u> 1000 V 🏝 🔁 🔿 | 17.0                       | 155                      | 28.5            | 544     |
| 98 05 19    | 026303          | 300              |                       | 19.0                       | 155                      | 31.0            | 674     |

# <sup>98</sup> ••• Adjustable Wrench



- parallel smooth gripping jaws
- continuously variable gripping width
- with scaling for presetting the width apart from the workpiece
- Chrome Vanadium steel



| Article No. | EAN<br>4003773- | <b>∢-</b> ►<br>mm |  | Tool             | Handle                    |    | Inch  | Jaw width<br>mm | Head width<br>mm | Width<br>mm | Depth<br>mm | ۲۵<br>g |
|-------------|-----------------|-------------------|--|------------------|---------------------------|----|-------|-----------------|------------------|-------------|-------------|---------|
| 98 07 250   | 071518          | 260               | <u>₩</u> 1000V ⊂ 1 <u>×</u> 22° <b>Ο</b> | chrome<br>plated | with dipped<br>insulation | 30 | 1 1/8 | 8.0             | 16.0             | 73.0        | 20.0        | 500     |



### <sup>98</sup> Screwdrivers for hexagon socket screws

IEC 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

98 13 30 £1000V @ € O

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                 | Тір       | Handle                          | Width across<br>flats S<br>mm | Blade length<br>mm | Length of<br>non-insulated blade<br>mm | Handle<br>length<br>mm | ۲٦<br>g |
|-------------|-----------------|-----------------|-----------------|-----------|---------------------------------|-------------------------------|--------------------|--|------------------------|---------|
| 98 13 20    | 071693          | 175             |                 |           |                                 | 2.0                           | 75.0               | 15.0                                   | 102                    | 40      |
| 98 13 25    | 026334          | 177             |                 |           | insulating multi-               | 2.5                           | 75.0               | 15.0                                   | 102                    | 32      |
| 98 13 30    | 026341          | 182             | A 1000 V<br>A≊A | burnished |                                 | 3.0                           | 75.0               | 15.0                                   | 107                    | 49      |
| 98 13 40    | 026358          | 182             |                 | Dumisned  | component handle,<br>VDE-tested | 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      |

# <sup>98</sup> Screwdrivers for hexagon socket

SCIEWS with T-handle

IEC 60900 DIN EN 60900



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                           | Width across flats S<br>mm | Length of non-insulated blade ± 2<br>mm | T-handle length<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|---------------------------|----------------------------|---|-----------------------|---------|
| 98 14 05    | 020431          | 120             |                           | 5.0                        | 9.0                                     | 90.0                  | 220     |
| 98 14 06    | 020448          | 120             | £ 1000 V <b>O</b>         | 6.0                        | 10.0                                    | 90.0                  | 208     |
| 98 14 08    | 020455          | 120             |                           | 8.0                        | 11.0                                    | 90.0                  | 286     |
| 98 15 05    | 020479          | 250             |                           | 5.0                        | 9.0                                     | 90.0                  | 363     |
| 98 15 06    | 020486          | 250             | <u></u> £ 1000 V <b>O</b> | 6.0                        | 10.0                                    | 90.0                  | 452     |
| 98 15 08    | 020493          | 250             |                           | 8.0                        | 11.0                                    | 90.0                  | 359     |

### 98 2

### Screwdrivers for slotted screws

IEC 60900 DIN EN 60900

£1000V ▲ 🖨 🗢

98 20 55

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

### 98 21 45

especially for meter assembly with blade length of 180 mm

| Article No. | EAN<br>4003773- | <b>∢</b> ⊸►<br>mm |                  | Тір       | Handle   | Blade width<br>mm | Blade thickness<br>mm | Length of<br>blade<br>mm | Length of non-<br>insulated blade<br>mm | Handle<br>length<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-------------------|------------------|-----------|--|-------------------|-----------------------|--------------------------|---|------------------------|-----------------------|
| 98 20 10    | 026396          | 320               |                  |           |  | 10.0              | 1.6                   | 200                      | 15                                      | 120                    | 184                   |
| 98 20 25    | 062325          | 177               |                  |           | insulating multi-  | 2.5               | 0.4                   | 75                       | 15                                      | 102                    | 32                    |
| 98 20 30    | 062332          | 202               |                  | burnished |  | 3.0               | 0.5                   | 100                      | 15                                      | 102                    | 35                    |
| 98 20 35    | 024217          | 202               | <u></u> £ 1000 V |           | component  | 3.5               | 0.6                   | 100                      | 15                                      | 102                    | 35                    |
| 98 20 40    | 026402          | 202               | <br>             |           | handle, VDE-<br>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               | â 1000 V<br>@€ ● | burnished | insulating<br>multi-compo-<br>nent handle,<br>VDE-tested | 4.5               | 0.8                   | 180                      | 15                                      | 107                    | 66                    |

Special tool steel, oil-hardened

### <sup>98</sup>2 Screwdrivers for cross-recessed SCICEWS Phillips®

IEC 60900 DIN EN 60900



### A 1000 V ▲ ● ●

- 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<br>4003773- | <b>∢→</b><br>mm |                     | Тір       | Handle            | Size | Blade length<br>mm | Length of non-insulated blade<br>mm | Handle<br>length<br>mm | ۵۵<br>g |
|-------------|-----------------|-----------------|---------------------|-----------|-------------------|------|--------------------|-------------------------------------|------------------------|---------|
| 98 24 00    | 026433          | 162             |                     |           |                   | PH 0 | 60                 | 15                                  | 102                    | 32      |
| 98 24 01    | 026440          | 187             |                     |           | insulating multi- | PH 1 | 80                 | 15                                  | 107                    | 58      |
| 98 24 02    | 026457          | 212             | A 1000 V<br>A C C C | burnished | component handle, | PH 2 | 100                | 18                                  | 112                    | 94      |
| 98 24 03    | 026464          | 270             | ee v                |           | VDE-tested        | PH 3 | 150                | 18                                  | 120                    | 165     |
| 98 24 04    | 026471          | 320             |                     | F         | PH 4              | 200  | 18                 | 120                                 | 244                    |         |

### <sup>98</sup>2 Screwdrivers for cross-recessed SCREWS Pozidriv®

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

IEC 60900 DIN EN 60900



### £1000V @ €

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Тір               | Handle            | Size | Blade length<br>mm | Length of non-insulated blade<br>mm | Handle<br>length<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|---------------------|-------------------|-------------------|------|--------------------|-------------------------------------|------------------------|---------|
| 98 25 00    | 062370          | 162             |                     |                   |                   | PZ 0 | 60                 | 15                                  | 102                    | 40      |
| 98 25 01    | 031260          | 187             |                     | insulating multi- | PZ 1              | 80   | 15                 | 107                                 | 58                     |         |
| 98 25 02    | 031277          | 212             | A 1000 V<br>ASC C C | burnished         | component handle, | PZ 2 | 100                | 18                                  | 112                    | 94      |
| 98 25 03    | 031284          | 270             |                     |                   | VDE-tested        | PZ 3 | 150                | 18                                  | 120                    | 165     |
| 98 25 04    | 062387          | 320             |                     |                   |                   | PZ 4 | 200                | 18                                  | 120                    | 85      |

### 98 2 Screwdrivers for Torx<sup>®</sup> screws

IEC 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

### 98 26 30 £1000V @ € €

| Ar | ticle No. | EAN<br>4003773- | <b>∢→</b><br>mm |                   | Тір       | Handle            | Size  | Blade length<br>mm | Length of non-insulated blade<br>mm | Handle<br>length<br>mm | ۲٦<br>g |
|----|-----------|-----------------|-----------------|-------------------|-----------|-------------------|-------|--------------------|-------------------------------------|------------------------|---------|
| 98 | 26 10     | 071709          | 160             |                   |           |                   | TX 10 | 60                 | 15                                  | 102                    | 25      |
| 98 | 26 15     | 071716          | 185             | A 400014          |           | insulating multi- | TX 15 | 80                 | 15                                  | 107                    | 25      |
| 98 | 26 20     | 071723          | 185             | A 1000 V<br>ASC C | burnished | component handle, | TX 20 | 80                 | 15                                  | 107                    | 25      |
| 98 | 26 25     | 071730          | 185             |                   |           | VDE-tested        | TX 25 | 80                 | 15                                  | 107                    | 25      |
| 98 | 26 30     | 071747          | 210             |                   |           |                   | TX 30 | 100                | 18                                  | 112                    | 25      |

98 26 30

### 98 40 T-handle with driving square 3/8" or 1/2"

IEC 60900 DIN EN 60900



**Reversible Ratchets** 

with driving square 3/8" or 1/2"

IEC 60900 DIN EN 60900

for use with sockets

- quick, easy and reliable locking of attached sockets
- basic tool chrome plated
- High-grade special tool steel, forged, oil-hardened

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |          | Handle<br>length<br>mm | Square<br>drive<br>Inch | ۲٦<br>g |
|-------------|-----------------|-----------------|----------|------------------------|-------------------------|---------|
| 98 30       | 026488          | 200             | <u> </u> | 165                    | 3/8                     | 447     |
| 98 40       | 026501          | 200             | <u> </u> | 165                    | 1/2                     | 631     |

- for use with sockets
- reversible for clockwise and anti-clockwise directions
- extremely smooth action
- quick, easy and reliable locking of attached sockets
- Chrome vanadium steel, forged



| Article No. | EAN<br>4003773- | <b>⊶</b> →<br>mm |            | Square drive<br>Inch | ۲۵<br>g |
|-------------|-----------------|------------------|------------|----------------------|---------|
| 98 31       | 026495          | 190              | 🛧 1000 V 🌃 | 3/8                  | 324     |
| 98 41       | 026518          | 265              | 숨 1000 V 🌌 | 1/2                  | 625     |

### 98

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### **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



<u>A</u>1000V № 🛞



| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                       | Square drive<br>Inch | ۲۵<br>g |
|-------------|-----------------|-----------------|-----------------------|----------------------|---------|
| 98 35 125   | 020530          | 125             | <b>会 1000 V 1⁄4 🛞</b> | 3/8                  | 149     |
| 98 35 250   | 020547          | 250             |                       | 3/8                  | 294     |
| 98 45 125   | 020813          | 125             | 桧1000 V 🛛 🕲           | 1/2                  | 258     |
| 98 45 250   | 020820          | 250             |                       | 1/2                  | 490     |

# Hexagon Sockets for hexagonal screws

for internal square 3/8" or 1/2"

IEC 60900 DIN EN 60900

98



98 37 17 **≙1000V O ③**  for metric and imperial hexagonal head screws basic tool chrome plated

Chrome Vanadium steel



| Article No.  | EAN<br>4003773- | <b>∢→</b><br>mm |              | Width across<br>flats S<br>mm | Width across<br>flats S<br>Inch | dia. of effective tool side d max.<br>mm | Square drive<br>Inch | ے<br>م |
|--------------|-----------------|-----------------|--------------|-------------------------------|---------------------------------|--|----------------------|--------|
| 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          |                 |              | 14.0                          |                                 | 23.7                                     | 3/8                  | 39     |
| 98 37 17     | 020639          |                 |              | 17.0                          |                                 | 27.5                                     | 3/8                  | 61     |
| 98 37 19     | 020646          |                 |              | 19.0                          |                                 | 30.0                                     | 3/8                  | 73     |
| 98 37 5/16"  | 020684          |                 | £ 1000 V 🔿 🐼 |                               | 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          |                 |              |                               | 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 37 1/4"   | 020561          |                 |              |                               | 1/4                             | 14.7                                     | 3/8                  | 30     |
| 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          |                 |              | 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          |                 | £ 1000 V 🔿 🕲 | 22.0                          |                                 | 34.5                                     | 1/2                  | 125    |
| 98 47 24     | 020998          |                 |              | 24.0                          |                                 | 37.0                                     | 1/2                  | 151    |
| 98 47 27     | 021001          |                 |              | 27.0                          |                                 | 41.0                                     | 1/2                  | 183    |
| 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          |                 |              |                               | 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    |

177



### Hexagon Sockets for hexagon socket

SCIEWS for internal square 3/8" or 1/2"

DIN 7422 IEC 60900 DIN EN 60900

- for metric internal hexagonal head screws
- basic tool chrome plated
- Special tool steel





#### 

| Article No. | EAN<br>4003773 | · mm |                     | Width across flats S<br>mm | Length of non-insulated blade ± 2<br>mm | Square drive<br>Inch | ۵ <sup>۲</sup> ۵<br>g |
|-------------|----------------|------|---------------------|----------------------------|---|----------------------|-----------------------|
| 98 39 05    | 020776         | 75   | A 1000 V <b>O</b> ⊠ | 5.0                        | 9                                       | 3/8                  | 59                    |
| 98 39 06    | 020783         | 75   |                     | 6.0                        | 10                                      | 3/8                  | 58                    |
| 98 49 05    | 021155         | 75   |                     | 5.0                        | 9                                       | 1/2                  | 68                    |
| 98 49 06    | 021162         | 75   | £ 1000 V <b>O </b>  | 6.0                        | 10                                      | 1/2                  | 72                    |
| 98 49 08    | 021179         | 75   |                     | 8.0                        | 11                                      | 1/2                  | 87                    |

#### **98** 4

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### 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

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |            | Square drive<br>Inch | ۲۵<br>g |
|-------------|-----------------|-----------------|------------|----------------------|---------|
| 98 42       | 026525          | 265             | A 1000 V 💋 | 1/2                  | 599     |

### 98

98 43 50 会 1000 V ½

### Torque Wrench with driving square, reversible

DIN EN ISO 6789 IEC 60900 DIN EN 60900

- reversible for tightening of lefthanded threads
- Iockable torque adjustment
- very reliable retention of the actuating tools ensured by mechanically locked retaining system
- transparent insulated scale range
- calibration certificate included
- Chrome Vanadium steel



#### Transparent insulated scale range

| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm |                   | Range of Application | Square drive<br>Inch | ۲۵<br>g |
|-------------|-----------------|------------------|-------------------|----------------------|----------------------|---------|
| 98 33 25    | 072676          | 290              | A 1000 V 🌌        | 5 - 25 Nm            | 3/8                  | 1230    |
| 98 33 50    | 071761          | 385              | <u>X</u> 1000 V M | 5 - 50 Nm            | 3/8                  | 1230    |
| 98 43 50    | 071778          | 385              | 숨 1000 V 💋        | 5 - 50 Nm            | 1/2                  | 1230    |



- 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
- solid, fixed straight blade
- transparent protective cap
- Blade: special tool steel, oil-hardened

#### 98 54

back of the blade plastic coated to avoid short circuits

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |              | Handle  | Blade length<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------|---|--------------------|---------|
| 98 52       | 035565          | 180             | 🛧 1000 V 🖄 🚭 | insulating multi-component handle, VDE-tested | 50                 | 67      |
| 98 54       | 026563          | 180             | 🛧 1000 V 🖄 🚭 | insulating multi-component handle, VDE-tested | 50                 | 68      |



### 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

#### 98 55 会1000V @≧

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |                     | Handle  | Blade length<br>mm | Radius<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|---------------------|---|--------------------|--------------|---------|
| 98 53 03    | 026549          | 155             | <b>会 1000 V 🖄 🚭</b> | insulating multi-component handle, VDE-tested | 28                 | 7            | 64      |
| 98 53 13    | 026556          | 180             | 숨 1000 V 🖄 😭        | insulating multi-component handle, VDE-tested | 50                 | 40           | 64      |
| 98 55       | 022558          | 155             | 🛧 1000 V 🖄 🛃        | insulating multi-component handle, VDE-tested | 38                 | 23.5         | 68      |

## Cable Knife with replaceable blade

IEC 60900 DIN EN 60900



#### **98** 60

### Voltage tester with load application

### DUSPOL<sup>®</sup> compact

DIN VDE 0682-401 IEC 61243-3 EN 61243-3





98 6

**98** 6

### Flat Nose Pliers of plastic, insulating

IEC 60900 DIN EN 60900 ASTM F1505



- 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

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                     | Blade length<br>mm | ۲٦<br>g |
|-------------|-----------------|-----------------|---------------------|--------------------|---------|
| 98 56       | 026570          | 185             | <b>☆ 1000 V 🖄 😭</b> | 50                 | 64      |
|             |                 |                 |                     |                    |         |
| 98 56 09    | 030829          | Spare b         | plade for 98 56     |                    |         |

- overvoltage category: CAT IV 500 V, III 690 V
- LED display shows direct and alternating current levels 12, 24, 50, 120, 230, 400 and 750 V
- polarity test with direct voltage
- intentional RCCB tripping
- protection class: IP 64 (dust-proof and splash-proof)



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |          | ۲۵<br>g |
|-------------|-----------------|-----------------|----------|---------|
| 98 60 04    | 051961          | 1400            | <u> </u> | 188     |

• the insulating construction reduces risk of short circuits

- for meter installation and meter blocking
- Plastic material, fibreglass reinforced

| Article No. | EAN<br>4003773- | <b>∢-</b> ►<br>mm |                   | ۵ <u>'</u> ۵<br>g |
|-------------|-----------------|-------------------|-------------------|-------------------|
| 98 62 01    | 073956          | 180               | £ 1000 V @ 🚰 🥅 আ∭ | 130               |

• the insulating construction reduces risk of short circuits

Plastic material, fibreglass reinforced

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                 | ۲<br>م<br>ع |
|-------------|-----------------|-----------------|-----------------|-------------|
| 98 62 02    | 073963          | 220             | ∄1000 V 🖄 🚭 🕀 🛲 | 140         |

98 62 01 ☆ 1000 V @€ □ □□

### Snipe Nose Pliers of plastic, insulating

IEC 60900 DIN EN 60900 ASTM F1505







### **98** 6

Plastic Slip-On Caps conical

DIN VDE 0680-1

|          | * # |  |
|----------|-----|--|
| 98 65 01 |     |  |
| 🛱 1000 V |     |  |



## <sup>98</sup> Self-Clamping Slip-On Caps

DIN VDE 0680-1





### **Electricians' Gloves**

IEC 60903 DIN EN 60903



98 65 40 **会 1000 V**  for holding insulating mats in place

- with integrated spring
- the insulating construction reduces the risk of short circuits
- Solid plastic, fibreglass-reinforced

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |             | Clamping<br>capacity<br>mm | ۲٦<br>g |
|-------------|-----------------|-----------------|-------------|----------------------------|---------|
| 98 64 02    | 021193          | 150             | 🗄 1000 V MM | 15                         | 61      |

• to cover bare live cable ends (max. 10 mm dia.)

Plastic

| Article No. | EAN<br>4003773- | <b>∢→</b><br>mm |          | Conductor key | ۵'ک<br>g |
|-------------|-----------------|-----------------|----------|---------------|----------|
| 98 65 01    | 021209          | 80              |          | 1             | 7        |
| 98 65 02    | 021216          | 80              | 🛱 1000 V | 2             | 8        |
| 98 65 03    | 021223          | 80              |          | 3             | 8        |

to cover bare live cable ends

Plastic

| Article No. | EAN<br>4003773- | <b>∢-</b> ►<br>mm |          | Inside dia.<br>mm | ۲۵<br>g |
|-------------|-----------------|-------------------|----------|-------------------|---------|
| 98 65 10    | 021230          | 80                |          | 10                | 9       |
| 98 65 20    | 021247          | 100               | 습 1000 V | 20                | 39      |
| 98 65 30    | 021261          | 110               |          | 30                | 52      |

• for added protection when working live or close to live parts

classification: 0

| Article No. | EAN<br>4003773- |          | Size | ۲۵<br>g |
|-------------|-----------------|----------|------|---------|
| 98 65 40    | 021285          | A 400014 | 9    | 290     |
| 98 65 41    | 021292          | <u> </u> | 10   | 288     |

#### 98 6

### Insulating Mats from rubber

DIN VDE 0680-1



- ☐ 1000 V @ €

### 98 90 PUK® Jun

### PUK<sup>®</sup> Junior Hacksaw

IEC 60900 DIN EN 60900



• for added protection when working live or close to live parts

| Article No. | EAN<br>4003773- |             | Dimensions<br>mm | Thickness<br>mm | ۵'۵<br>g |
|-------------|-----------------|-------------|------------------|-----------------|----------|
| 98 67 05    | 026600          | ⇔<br>1000 V | 500 x 500        | 1.0             | 301      |
| 98 67 10    | 026617          | 2 1000 V    | 1000 x 1000      | 1.0             | 1200     |

• saw blade for metal and wood with 25 teeth per inch, exchangeable

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm |                  | Saw blade length<br>mm | ۲٦<br>g |
|-------------|-----------------|-----------------|------------------|------------------------|---------|
| 98 90       | 028321          | 240             | <u></u> £ 1000 V | 150                    | 174     |

**98** 9

### Compact Tool Case 17 parts

with insulated tools for works on electrical installations

IEC 60900 DIN EN 60900

- shock-resistant plastic case
- containing 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



| Article No. | EAN<br>4003773- |                            |   | Units |                     | ے<br>م |  |
|-------------|-----------------|----------------------------|---|-------|---------------------|--------|--|
| 98 99 11    | 026624          | Compact Tool Case 17 parts |   |       |                     |        |  |
|             |                 | 03 07 200                  | Combination Pliers                        | 1     | £ 1000 V 🖄 🚰 💷 🕨 🕈  |        |  |
|             |                 | 70 07 160                  | Diagonal Cutter                           | 1     | 桧 1000 V 🖄 🖨 🕨 ◄    |        |  |
|             |                 | 98 20 35                   | Screwdrivers for slotted                  | 1     | <b>≙</b> 1000V      |        |  |
|             |                 | 98 20 40                   | screws                                    | 1     |                     |        |  |
|             |                 | 98 20 55                   |   | 1     | Æ                   |        |  |
|             |                 | 98 24 00                   | Screwdrivers for<br>cross-recessed screws | 1     | A 1000 V 🖄 🖨 🗘      |        |  |
|             |                 | 98 42                      | Reversible Ratchet                        | 1     | <b>会 1000 V </b> ₩  |        |  |
|             |                 | 98 45 125                  | Extension Bars                            | 1     | A 1000 V 🕅 💬        |        |  |
|             |                 | 98 45 250                  |   | 1     | <u> </u>            |        |  |
|             |                 | 98 47 10                   |   | 1     |                     |        |  |
|             |                 | 98 47 11                   |   | 1     |                     |        |  |
|             |                 | 98 47 12                   |   | 1     |                     |        |  |
|             |                 | 98 47 13                   | Hexagon Sockets for<br>hexagonal screws   | 1     | £ 1000 V 🔿 🕲        |        |  |
|             |                 | 98 47 14                   | nekayunai sciews                          | 1     |                     |        |  |
|             |                 | 98 47 17                   |   | 1     |                     |        |  |
|             |                 | 98 47 19                   |   | 1     |                     |        |  |
|             |                 | 98 52                      | Cable Knife                               | 1     | <b>☆ 1000 V 🖄 🚰</b> |        |  |

### 98 Standard Tool Case 26 parts

#### with insulated tools for works on electrical installations

IEC 60900 DIN EN 60900



98 99 12 🖄 🗲

| Article No. | EAN<br>4003773- |                    |  | Units |                            | ے<br>ا |
|-------------|-----------------|--------------------|--|-------|----------------------------|--------|
| 98 99 12    | 026631          | Standard Tool Case | 26 parts   |       |                            | 423    |
|             |                 | 03 07 200          | Combination Pliers                               | 1     | A 1000 V A A               |        |
|             |                 | 70 07 160          | Diagonal Cutter                                  | 1     | <b>≙ 1000 V 🕸 🚅 ► ◄</b>    |        |
|             |                 | 98 00 10           |  | 1     |                            |        |
|             |                 | 98 00 11           |  | 1     |                            |        |
|             |                 | 98 00 12           |  | 1     |                            |        |
|             |                 | 98 00 13           | Open End Wrench                                  | 1     | <u></u> £ 1000 V <b>○</b>  |        |
|             |                 | 98 00 14           |  | 1     |                            |        |
|             |                 | 98 00 17           |  | 1     |                            |        |
|             |                 | 98 00 19           |  | 1     |                            |        |
|             |                 | 98 53 03           | Dismantling Knife for round cable                | 1     | <b>≙ 1000 V 🖄 🚅</b>        |        |
|             |                 | 98 20 25           |  | 1     | 1000 V 🏝 🖨 🖨               |        |
|             |                 | 98 20 35           | Screwdrivers for slotted screws                  | 1     |                            |        |
|             |                 | 98 20 40           |  | 1     |                            |        |
|             |                 | 98 20 55           |  | 1     |                            |        |
|             |                 | 98 24 00           |  | 1     |                            |        |
|             |                 | 98 24 01           | Screwdrivers for cross-recessed screws, Philips® | 1     | 🚖 1000 V 🖄 🖨 🗘             |        |
|             |                 | 98 24 02           |  | 1     |                            |        |
|             |                 | 98 40              | T-handle   | 1     | <u> A</u> 1000 V 🜌         |        |
|             |                 | 98 47 10           |  | 1     |                            |        |
|             |                 | 98 47 11           |  | 1     |                            |        |
|             |                 | 98 47 12           |  | 1     |                            |        |
|             |                 | 98 47 13           | Hexagon Socket for hexagonal screws              | 1     | <b>≙</b> 1000 V <b>○</b> 🕲 |        |
|             |                 | 98 47 14           |  | 1     |                            |        |
|             |                 | 98 47 17           |  | 1     |                            |        |
|             |                 | 98 47 19           |  | 1     |                            |        |
|             |                 | 98 52              | Cable Knife                                      | 1     | <b>会 1000 V @</b>          |        |

- containing a range of insulated KNIPEX tools for works on electrical installations
- shock-resistant plastic case
- foam inserts with recesses for the tools
- fixable partition wall
- dimensions, exterior (W x H x D): 440 x 105 x 385 mm

## 98 9 Tool Roll 15 parts

### with insulated tools for works on electrical installations

IEC 60900 DIN EN 60900IEC 60900 DIN EN 60900

- tool roll made of hard-wearing polyester fabric
  with practical, adjustable quick release fastener
  containing a range of insulated KNIPEX tools for works on electrical installations



98 99 13 <u></u> £ 1000 V

| Article No. | EAN<br>4003773- |                 |                                | Units |                           | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|-----------------|--------------------------------|-------|---------------------------|-----------------------|
| 98 99 13    | 026648          | Tool Roll 15 pa | rts                            |       |                           | 2455                  |
|             |                 | 03 07 200       | Combination Pliers             | 1     | 🟦 1000 V 🖄 😭 💷 🚺 🕨        |                       |
|             |                 | 11 07 160       | Insulation Stripper            | 1     | £ 1000 V @ € MM           |                       |
|             |                 | 26 17 200       | Snipe Nose Side Cutting Pliers | 1     | £ 1000 V @ 🚰 🖯 💷 🕨 🕈      |                       |
|             |                 | 70 07 160       | Diagonal Cutter                | 1     | <b>会 1000 V @ 😭 ▶ ◄</b>   |                       |
|             |                 | 95 17 200       | Cable Shear                    | 1     | 숨 1000 V 🖄 😭 🔂 🖺 🕤        |                       |
|             |                 | 98 00 10        |                                | 1     |                           |                       |
|             |                 | 98 00 13        |                                | 1     |                           |                       |
|             |                 | 98 00 14        | Open End Wrench                | 1     | <u></u> £ 1000 V <b>Ο</b> |                       |
|             |                 | 98 00 17        |                                | 1     |                           |                       |
|             |                 | 98 00 19        |                                | 1     |                           |                       |
|             |                 | 98 20 25        |                                | 1     |                           |                       |
|             |                 | 98 20 40        | Screwdriver for slotted screws | 1     | A 1000 V @ 🛋 🖱            |                       |
|             |                 | 98 20 55        | SCIEWUIIVEI IUI SIULLEU SCIEWS | 1     | <u> </u>                  |                       |
|             |                 | 95 20 65        |                                | 1     |                           |                       |
|             |                 | 98 52           | Cable Knife                    | 1     | <b>会 1000 V @€</b>        |                       |

### <sup>98</sup> Universal Tool Case 48 parts

#### with insulated tools for works on electrical installations

IEC 60900 DIN EN 60900





#### 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 (W x H x D): 490 x 255 x 410 mm dimensions, internal (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 running rolls
- dimensions: 60 x 245 x 400 (1.000) mm (extended)

### **INSULATED TOOLS**

| Article No. | EAN<br>4003773- |                      |   |                      | Quantity |                        | ۲۵<br>q |
|-------------|-----------------|----------------------|---|----------------------|----------|------------------------|---------|
| 98 99 14    | 026655          | Universal Tool       | Case 48 parts                                     |                      |          |                        | 1625    |
|             |                 | 03 07 200            | Combination Pliers                                | 200 mm               | 1        | 🛧 1000 V 🖄 🚭 🎟 🚺 ► 🗨   |         |
|             |                 | 11 17 160            | Insulation Stripper                               | 160 mm               | 1        | <b>会</b> 1000 V 🖄 🚰    |         |
|             |                 | 70 07 160            | Diagonal Cutter                                   | 160 mm               | 1        | <u></u> £ 1000 V @ € ► |         |
|             |                 | 88 07 250            | KNIPEX Alligator®                                 | 250 mm               | 1        | â 1000 V @ 🚰 💷 🖾       |         |
|             |                 | 95 17 200            | Cable Shears                                      | 200 mm               | 1        | 🛧 1000 V 🖄 😭 🔂 🖺 🖫     |         |
|             |                 | 98 00 10             |   | SW 10 mm             | 1        |                        |         |
|             |                 | 98 00 13             |   | SW 13 mm             | 1        |                        |         |
|             |                 | 98 00 14             |   | SW 14 mm             | 1        |                        |         |
|             |                 | 98 00 17             | Open End Wrench                                   | SW 17 mm             | 1        |                        |         |
|             |                 | 98 00 19             |   | SW 19 mm             | 1        |                        |         |
|             |                 | 98 00 22             |   | SW 22 mm             | 1        | <u> </u>               |         |
|             |                 | 98 01 10             |   | SW 10 mm             | 1        |                        |         |
|             |                 | 98 01 13             |   | SW 13 mm             | 1        |                        |         |
|             |                 | 98 01 14             |   | SW 14 mm             | 1        |                        |         |
|             |                 | 98 01 17             | Box Wrench  | SW 17 mm             | 1        |                        |         |
|             |                 | 98 01 19             |   | SW 19 mm             | 1        |                        |         |
|             |                 | 98 01 22             |   | SW 22 mm             | 1        |                        |         |
|             |                 | 98 67 05             | Insulating Mat                                    | 500 x 500 1.6 mm     | 3        | 🛱 1000 V 🖄 🖨           |         |
|             |                 | 98 20 25             |   | 2.5 mm               | 1        | 2                      |         |
|             |                 | 98 20 40             |   | 4.0 mm               | 1        |                        |         |
|             |                 | 98 20 55             | Screwdriver for slotted screws                    | 5.5 mm               | 1        | <u> </u>               |         |
|             |                 | 98 20 65             | 65 6.<br>01 Screwdriver for cross-recessed screws | 6.5 mm               | 1        |                        |         |
|             |                 | 98 24 01             |   | PH 01                | 1        |                        |         |
|             |                 | 98 24 02             |   | PH 02                | 1        | 🛧 1000 V 🖄 🚰 🗘         |         |
|             |                 | 98 40                | T-Handle  | 165 mm               | 1        |                        |         |
|             |                 | 98 42                | Reversible Ratchet                                | 265 mm               | 1        | <u> 순</u> 1000 V 🌌     |         |
|             |                 | 98 45 125            |   | 125 mm               | 1        |                        |         |
|             |                 | 98 45 250            | Extension Bar                                     | 250 mm               | 1        | 🛧 1000 V 🌌 🛞           |         |
|             |                 | 98 47 10             |   | SW 10 mm             | 1        |                        |         |
|             |                 | 98 47 10             |   | SW 10 mm             | 1        |                        |         |
|             |                 | 98 47 12             |   | SW 12 mm             | 1        |                        |         |
|             |                 | 98 47 12             |   | SW 12 mm             | 1        |                        |         |
|             |                 | 98 47 13<br>98 47 14 | Hexagon Socket for hexagonal screws               | SW 13 mm<br>SW 14 mm | 1        | <u> </u>               |         |
|             |                 | 98 47 14<br>98 47 17 | Hexagon Socket for hexagonal screws               | SW 14 mm<br>SW 17 mm |          |                        |         |
|             |                 | 98 47 17<br>98 47 19 |   | SW 17 mm<br>SW 19 mm | 1        |                        |         |
|             |                 | 98 47 19<br>98 47 22 |   | SW 19 mm<br>SW 22 mm | 1        |                        |         |
|             |                 | 98 47 22<br>98 47 24 |   | SW 22 mm<br>SW 24 mm | 1        |                        |         |
|             |                 |                      | Cable Knife                                       |                      | 1        |                        |         |
|             |                 | 98 52                |   | 180 mm               | 1        | <u> </u>               |         |
|             |                 | 98 53 03             | Dismantling Knife for round cable                 | 155 mm               | 1        |                        |         |
|             |                 | 98 64 02             | Insulating Clamp                                  | 150 mm               | 6        | ♣ 1000 V MM            |         |
| 0 00 14 15  | 060702          | 98 65 40             | Electricians' Gloves                              | 9                    | 1        | <u> </u>               | 70      |
| 8 99 14 LE  | 060703          | Universal Tool       | Case, empty                                       |                      |          |                        | 79      |

Model 99 Concretors' Nippers, see starting from Page 64

## 00 11 Control Cabinet Keys

for all standard cabinets and shut-off systems



00 11 02 short version, total length 44 mm

- 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 PH 2
- with adapter for 1/4" bits on chained to key
- additional bit adapter for 1/4" bits inside one profile
- Z

| Zinc die-casted |                 |                 |           |                  |           |                       |
|-----------------|-----------------|-----------------|-----------|------------------|-----------|-----------------------|
| Article No.     | EAN<br>4003773- | <b>←→</b><br>mm | O⊒<br>mm  | <b>∆</b> ⊒<br>mm | -OI<br>mm | ۵ <sup>۲</sup> ۵<br>g |
| 00 11 02        | 048947          | 44              | 5/6/8     | 9                | 3 - 5     | 65                    |
| 00 11 00        | 041050          | 70              | F / C / O | 0                | Э Г       | 00                    |

- 00 11 03 041658 76 5/6/8 9 3-5 88 • key for heating, air conditio-
- ning, 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 PH 2
- with adapter for 1/4" bits chained to key
- additional bit adapter for 1/4" bits inside one profile
- total le
- Zinc di

Article I



| ength: 9<br>ie-casteo |                 |             |    |  |    |
|-----------------------|-----------------|-------------|----|--|----|
| No.                   | EAN<br>4003773- | <b>∢-</b> ► | O∃ |  | 52 |

|          |        |    |       |        |         | 5  |
|----------|--------|----|-------|--------|---------|----|
| 00 11 04 | 048954 | 90 | 5/7/8 | 9 - 10 | 6/7/8/9 | 86 |

- 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



| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | O⊒<br>mm     |                   | - <b>O</b> E<br>mm | O∃<br>mm | ۲۵<br>g |
|-------------|-----------------|-----------------|--------------|-------------------|--------------------|----------|---------|
| 00 11 06    | 071334          | 90              | 5/6/7-8/9-10 | 7 / 8-9 / 10 - 11 | 3 - 5              | 6        | 220     |







00 11 04

**00** 11

Universal Key

for all standard cabinets and shut-off systems



## Pen-Style Control Cabinet Key

for all standard cabinets and shut-off systems



00 11 07

| Article No. | EAN      | <b>∢-→</b> | O∃            | <b>∆</b> ⊒ | -OE   | ۲۵  |
|-------------|----------|------------|---------------|------------|-------|-----|
|             | 4003773- | mm         | <sup>mm</sup> | mm         | mm    | g   |
| 00 11 07    | 063018   | 145        | 5/6/8         | 9          | 3 - 5 | 152 |

- easy to carry pen-style control cabinet key with fastening clip
- four different key profiles can be utilized 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 inserted bit: cross recess PH 2 and possibility of safekeeping a second bit
- Tool body: plastic, fibreglass-reinforced
- Key profiles: zinc die-casted





### 0

## Pen-Style Profi-Key

for all standard shut-off systems



00 11 08

| Article No. | EAN<br>4003773- | <b>←→</b><br>mm | O⊒<br><sup>mm</sup> | <b>∆</b> ⊒<br>mm | mm      | ۲<br>g |
|-------------|-----------------|-----------------|---------------------|------------------|---------|--------|
| 00 11 08    | 063025          | 145             | 5/8                 | 9                | 6/7/8/9 | 142    |

- easy to carry pen-style control cabinet key with fastening clip
- three different key profiles can be utilized by swivelling the key holder
- 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 PH 2 and possibility of safekeeping a second bit
- Tool body: plastic, fibreglass-reinforced
- Key profiles: zinc die-casted





## Pen-Style Control Cabinet Key

with voltage 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; range of voltage 50 - 600 V; frequency range 50 - 60 Hz
- on / off button
- indicated by means of a bright LED: start-up self test, battery control and live conductor close-by detection
- battery case with bayonet catch
- four different key profiles can be utilized 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 inseted bit: cross recess PH 2
- Tool body: plastic, fibreglass-reinforced
- Key profiles: zinc die-casted





| Article No. | EAN<br>4003773- | <b>∢</b> →<br>mm |                    | O⊒<br>mm | <b>∆</b> ∃<br>mm | - <b>O</b> ⊒<br>mm | ۵۵<br>g |  |
|-------------|-----------------|------------------|--------------------|----------|------------------|--------------------|---------|--|
| 00 11 17    | 068396          | 155              | 1 <b>111 (E</b> 11 | 6 / 8    | 9                | 3 - 5              | 136     |  |

## 00 19 Counter Displays

• made from high-quality paperboard printed with high gloss finish



00 19 12 V02

| Article No.  | EAN<br>4003773- |           | Contents           | Quantity | Width<br>mm | Height<br>mm | Depth<br>mm | ۲<br>g |
|--------------|-----------------|-----------|--------------------|----------|-------------|--------------|-------------|--------|
| 00 19 12 V01 | 070368          | 86 03 150 | Mini Pliers Wrench | 8        | 170         | 288          | 345         | 1590   |
| 00 19 12 V02 | 070375          | 86 05 150 | Mini Pliers Wrench | 8        | 170         | 290          | 345         | 1775   |
| 00 19 12 V03 | 070740          | 87 01 125 | KNIPEX Cobra®      | 12       | 290         | 280          | 160         | 1245   |

## Counter Displays 10 parts

KNIPE) Made in Ge

00 19 19 V02

- all-round colouring with neutral header
- small size, minimum space required at the point of sales
  dimensions, assembled (W x H x D): 225 x 435 x 225 mm
- dimensions, packed (W x H x D): 260 x 350 x 260 mm
  other contents (5 + 5 or 10 pieces) possible, minimum quantity and delivery time on request
- Material: solid cardboard, printed

| Article No.  | EAN<br>4003773- | Contents                      | ۲۵<br>g |
|--------------|-----------------|-------------------------------|---------|
| 00 19 19 V01 | 073147          | 10 x 68 01 200                | 3610    |
| 00 19 19 V02 | 073154          | 10 x 87 01 250                | 3560    |
| 00 19 19 V03 | 073161          | 10 x 88 01 180                | 2220    |
| 00 19 19 V04 | 073178          | 10 x 88 01 250                | 3610    |
| 00 19 19 V05 | 073185          | 10 x 99 01 280                | 5420    |
| 00 19 19 V06 | 073192          | 5 x 68 01 160 / 5 x 68 01 180 | 2850    |
| 00 19 19 V07 | 073208          | 5 x 85 01 250 / 5 x 87 41 250 | 3910    |
| 00 19 19 V08 | 073215          | 5 x 86 03 180 / 5 x 86 03 250 | 4370    |
| 00 19 19 V09 | 073222          | 5 x 87 01 180 / 5 x 87 01 250 | 2540    |
| 00 19 19 V10 | 073239          | 5 x 87 01 250 / 5 x 87 01 300 | 4645    |
| 00 19 19 V11 | 073246          | 5 x 88 01 250 / 5 x 88 01 300 | 4570    |
| 00 19 19 V12 | 073253          | 5 x 99 00 250 / 5 x 99 00 280 | 4370    |
| 00 19 19 V13 | 073789          | 10 x 71 01 200                | 3820    |

| ( | J | U |
|---|---|---|
|   | 1 | 9 |

### Cobra<sup>®</sup> range in sales display



- attractive sales display for presentation of the Cobra<sup>®</sup> familiy
- solid style; can be fixed on tool bar systems, also suitable as counter display
- with integrated brochure holder for "Cobra®" leaflets
- with transparent label holders
- please do always request leaflets and labels
  includes three "Cobras<sup>®</sup>" each 87 01 150/180/250/300/400/560
- Material: steel wire, silver powder coated

| Art | ticle No. | EAN<br>4003773- | Contents  | Quantity | Width<br>mm | Height<br>mm | Depth<br>mm | ۲۵<br>g |
|-----|-----------|-----------------|---|----------|-------------|--------------|-------------|---------|
| 00  | 19 29     | 052340          | Sales Display for KNIPEX Cobra® Water Pump Pliers |          | 610         | 445          | 250         | 19600   |
|     |           |                 | 87 01 150   | 3        |             |              |             |         |
|     |           |                 | 87 01 180   | 3        |             |              |             |         |
|     |           |                 | 87 01 250   | 3        |             |              |             |         |
|     |           |                 | 87 01 300   | 3        |             |              |             |         |
|     |           |                 | 87 01 400   | 3        |             |              |             |         |
|     |           |                 | 87 01 560   | 3        |             |              |             |         |

## <sup>00</sup> <sup>19</sup> Tool Roll 11 parts



#### 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

#### 00 19 41

| Article No. | EAN<br>4003773- |                 | Contents                              |        | Quantity |                | ۲٦<br>g |  |  |  |
|-------------|-----------------|-----------------|---------------------------------------|--------|----------|----------------|---------|--|--|--|
| 00 19 41    | 024729          | Tool Roll 11 pa | Fool Roll 11 parts                    |        |          |                |         |  |  |  |
|             |                 | 03 05 160       | Combination Pliers                    |        | 1        |                |         |  |  |  |
|             |                 | 11 15 160       | Insulation Stripper                   |        | 1        |                |         |  |  |  |
|             |                 | 25 05 160       | Snipe Nose Side Cutting Pliers        |        | 1        | $\Theta$       |         |  |  |  |
|             |                 | 30 15 160       | Long Nose Pliers                      |        | 1        |                |         |  |  |  |
|             |                 | 30 35 160       | Long Nose Pliers                      |        | 1        | 8              |         |  |  |  |
|             |                 | 31 15 160       | Gripping Pliers                       |        | 1        | $\Box \Box$    |         |  |  |  |
|             |                 | 67 05 140       | High Leverage End Cutting Nipper      |        | 1        |                |         |  |  |  |
|             |                 | 70 05 140       | Diagonal Cutter                       |        | 1        |                |         |  |  |  |
|             |                 | 98 20 25        | Screwdriver for slotted screws        | 2.5 mm | 1        | £ 1000 V 🖄 🚭 🖨 |         |  |  |  |
|             |                 | 98 20 40        | Screwdriver for slotted screws        | 4.0 mm | 1        | £ 1000 V 🖄 😭 🖨 |         |  |  |  |
|             |                 | 98 24 01        | Screwdriver for cross-recessed screws | PH 01  | 1        | 🛧 1000 V 🖄 🚭 🗘 |         |  |  |  |



CO

## 00 19 Circlip Pliers Sets 4 parts





CO

- tool roll made of hard-wearing polyester fabric
- with practical, adjustable quick release fastener

#### 00 19 56

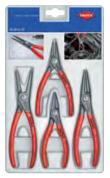
contains four common Circlip Pliers for internal and external circlips

#### 00 19 57

contains common Precision Circlip Pliers for highest requirements

| Article No. | EAN<br>4003773- |                            | Contents                 | Style         | Tips<br>Ø mm | Quantity |                   | ۲۵<br>g |
|-------------|-----------------|----------------------------|--------------------------|---------------|--------------|----------|-------------------|---------|
| 00 19 56    | 030973          | Circlip Pliers Set 4 parts |                          |               |              |          |                   |         |
|             |                 | 44 11 J2                   | Circlip Pliers           | straight tips | 19 - 60      | 1        | C                 |         |
|             |                 | 44 21 J21                  | Circlip Pliers           | angled tips   | 19 - 60      | 1        | ℃ <u>∡9</u> °°    |         |
|             |                 | 46 11 A2                   | Circlip Pliers           | straight tips | 19 - 60      | 1        | 0 MM O            |         |
|             |                 | 46 21 A21                  | Circlip Pliers           | angled tips   | 19 - 60      | 1        | © <u>∡</u> 90° MM |         |
| 00 19 57    | 050056          | Circlip Pliers Set         | 4 parts                  |               |              |          |                   | 665     |
|             |                 | 48 11 J1                   | Precision Circlip Pliers | straight tips | 12 - 25      | 1        | 0 <b>11</b>       |         |
|             |                 | 48 11 J2                   | Precision Circlip Pliers | straight tips | 19 - 60      | 1        | OT                |         |
|             |                 | 49 11 A1                   | Precision Circlip Pliers | straight tips | 10 - 25      | 1        | OSSMM             |         |
|             |                 | 49 11 A2                   | Precision Circlip Pliers | straight tips | 19 - 60      | 1        | OSSAM             |         |

**Precision Circlip Pliers Sets** 



00 20 03 SB

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 4 parts

00 20 04 SB 8 parts

| СО          |                 | 00                           |               |              |          |                          |          |  |
|-------------|-----------------|------------------------------|---------------|--------------|----------|--------------------------|----------|--|
| Article No. | EAN<br>4003773- | Contents                     | Style         | Tips<br>Ø mm | Quantity |                          | ۵'ک<br>g |  |
| 00 20 03 SB | 050100          | Precision Circlip Pliers Set |               |              |          |                          | 685      |  |
|             |                 | 48 11 J1                     | straight tips | 12 - 25      | 1        | oti                      |          |  |
|             |                 | 48 11 J2                     | straight tips | 19 - 60      | 1        |                          |          |  |
|             |                 | 49 11 A1                     | straight tips | 10 - 25      | 1        | 0 EI MM                  |          |  |
|             |                 | 49 11 A2                     | straight tips | 19 - 60      | 1        |                          |          |  |
| 00 20 04 SB | 062417          | Precision Circlip Pliers Set |               |              |          |                          |          |  |
|             |                 | 48 11 J1                     | straight tips | 12 - 25      | 1        | OFI                      |          |  |
|             |                 | 48 11 J2                     | straight tips | 19 - 60      | 1        |                          |          |  |
|             |                 | 49 11 A1                     | straight tips | 10 - 25      | 1        | O ES MM                  |          |  |
|             |                 | 49 11 A2                     | straight tips | 19 - 60      | 1        |                          |          |  |
|             |                 | 48 21 J11                    | angled tips   | 12 - 25      | 1        | ♡ <u>∡</u> 90° <b>₽€</b> |          |  |
|             |                 | 48 21 J21                    | angled tips   | 19 - 60      | 1        |                          |          |  |
|             |                 | 49 21 A11                    | angled tips   | 12 - 25      | 1        | ᠿ ∡90° ছ°≅ ለለለለ          |          |  |
|             |                 | 49 21 A21                    | angled tips   | 19 - 60      | 1        | ©∡90° <b>€</b> ≦ MM      |          |  |

# **Pliers Sets** in a foam tray



00 20 01 V01



00 20 01 V02



00 20 01 V03

- in a foam tray for workbenches and tool trolleysclearly 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 V01 four pliers in a foam tray

00 20 01 V02 six circlip pliers in a foam tray

**00 20 01 V03** three pliers in a foam tray





| Article No.  | EAN<br>4003773- |  | Contents                       | Quantity |                              | ۲۵<br>g |
|--------------|-----------------|--|--------------------------------|----------|------------------------------|---------|
| 00 20 01 V01 | 069645          | Pliers Set "Basic"                                   | 4 pliers in a foam tray        |          |                              | 1095    |
|              |                 | 03 05 180  | Combination Pliers             | 1        |                              |         |
|              |                 | 26 15 200  | Snipe Nose Side Cutting Pliers | 1        | $\Theta$                     |         |
|              |                 | 74 05 180  | High Leverage Diagonal Cutter  | 1        |                              |         |
|              |                 | 87 01 250  | KNIPEX Cobra®                  | 1        |                              |         |
| 00 20 01 V02 | 069652          | 2 Circlip Pliers Set 6 circlip pliers in a foam tray |                                |          | 915                          |         |
|              |                 | 48 11 J1   | Precision Circlip Pliers       | 1        | oti                          |         |
|              |                 | 48 11 J2   | Precision Circlip Pliers       | 1        |                              |         |
|              |                 | 48 21 J21  | Precision Circlip Pliers       | 1        | Ů∡9° ₽€                      |         |
|              |                 | 49 11 A1   | Precision Circlip Pliers       | 1        | 83 <b>5-7</b> AAAA           |         |
|              |                 | 49 11 A2   | Precision Circlip Pliers       | 1        |                              |         |
|              |                 | 49 21 A21  | Precision Circlip Pliers       | 1        | Ů <u>∡</u> 90° <b>€</b> ≦ MM |         |
| 00 20 01 V03 | 069669          | Water Pump Pliers                                    | Set 3 pliers in a foam tray    |          |                              | 1065    |
|              |                 | 85 01 250  | KNIPEX SmartGrip <sup>®</sup>  | 1        |                              |         |
|              |                 | 87 41 250  | Multiple Slip Joint Spanner    | 1        |                              |         |
|              |                 | 87 51 250  | KNIPEX Cobra <sup>®</sup> ES   | 1        |                              |         |

## <sup>00</sup><sub>20</sub> Pliers Sets



00 20 09 V01



00 20 11



00 20 10



- 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
- Material: sturdy cardboard packaging, printed

#### 00 20 09 V01

pliers with polished heads; handles with non-slip plastic coating or with two-colour multi-components grips

#### 00 20 10

pliers with polished heads and plastic coated handles

#### 00 20 11

pliers with two-colour multi-component grips

#### 00 20 12

pliers VDE-tested in conformance with DIN EN/IEC 60900 1000V, pliers chrome-plated; handles with multi-component grips

#### 00 20 13

tools VDE-tested in conformance with DIN EN/IEC 60900 1000V, pliers chrome-plated; handles with multi-component grips



| Article No.  | EAN<br>4003773- |                | Contents   |        | Quantity | Nominal size       |                      | ۍ <sup>ې</sup> ک<br>g |
|--------------|-----------------|----------------|--|--------|----------|--------------------|----------------------|-----------------------|
| 00 20 09 V01 | 073994          | Bestseller Set |  |        |          |                    |                      | 950                   |
|              |                 | 03 02 180      | Combination Pliers                                 |        | 1        | 180 mm             |                      |                       |
|              |                 | 70 02 160      | Diagonal Cutter                                    | Knipex | 1        | 160 mm             |                      |                       |
|              |                 | 87 01 250      | KNIPEX Cobra®                                      |        | 1        | 250 mm             |                      |                       |
| 00 20 10     | 010388          | Power Set      |  |        |          |                    |                      | 990                   |
|              |                 | 02 01 180      | High Leverage Combination Pliers                   |        | 1        | 180 mm             |                      |                       |
|              |                 | 74 01 160      | High Leverage Diagonal Cutter                      | Knipex | 1        | 160 mm             |                      |                       |
|              |                 | 87 01 250      | KNIPEX Cobra®                                      |        | 1        | 250 mm             |                      |                       |
| 00 20 11     | 012405          | Assembly Set   |  |        |          |                    |                      | 935                   |
|              |                 | 03 02 180      | Combination Pliers                                 |        | 1        | 180 mm             |                      |                       |
|              |                 | 26 12 200      | Snipe Nose Side Cutting Pliers                     | Knipex | 1        | 200 mm             | $\Theta$             |                       |
|              |                 | 70 02 160      | Diagonal Cutter                                    |        | 1        | 160 mm             |                      |                       |
| 00 20 12     | 012412          | Electro Set    |  |        |          |                    |                      | 960                   |
|              |                 | 03 06 180      | Combination Pliers                                 |        | 1        | 180 mm             | 🟦 1000 V 🖄 😭 💷 🚺 🗲 🕇 |                       |
|              |                 | 26 16 200      | Snipe Nose Side Cutting Pliers                     | Knipex | 1        | 200 mm             | â 1000 V @ 🚰 🕀 💷 🚺 🗲 |                       |
|              |                 | 70 06 160      | Diagonal Cutter                                    |        | 1        | 160 mm             | £ 1000 V 🕸 🚰 ► 🗨     |                       |
| 00 20 13     | 043287          | VDE Tool Set   |  |        |          |                    |                      | 850                   |
|              |                 | 26 16 200      | Snipe Nose Side Cutting Pliers                     | Kninov | 1        | 200 mm             | £ 1000 V 🖄 🚭 🖯 💷 🚺 🗲 |                       |
|              |                 | 70 06 160      | Diagonal Cutter                                    | Knipex | 1        | 160 mm             | £ 1000 V 🖄 🚰 💌       |                       |
|              |                 | 006110         | Screwdrivers for slotted screws                    |        | 1        | 0.6 x 3.5 x 100 mm | £ 1000 V 🖄 🚰 🖨       |                       |
|              |                 | 006120         | Screwullvers for slotted screws                    | Wera   | 1        | 1.0 x 5.5 x 125 mm | £ 1000 V 🖄 😭 🖨       |                       |
|              |                 | 006154         | Screwdrivers for cross recessed<br>Phillips screws | VVCIA  | 1        | PH2 x 100 mm       | £ 1000 V 🏝 🖨 🗘       |                       |

# **Compact-Box** 4 parts

### with insulated pliers



- 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 20 15

all pliers VDE tested according to DIN EN/IEC 60900 1000V, pliers finish 6

00 21 15 LE without tools

| Article N | No.   | EAN<br>4003773- |                     | Contents                       | Quantity |                      | ۲۵<br>g |
|-----------|-------|-----------------|---------------------|--------------------------------|----------|----------------------|---------|
| 00 20 1   | 15    | 024804          | Compact-Box 4 parts |                                |          |                      | 1430    |
|           |       |                 | 03 06 180           | Combination Pliers             | 1        | £ 1000 V 🖄 🚰 💷 🚺 ► 🖣 |         |
|           |       |                 | 11 06 160           | Wire Stripper                  | 1        | £ 1000 V @€ MM       |         |
|           |       |                 | 26 16 200           | Snipe Nose Side Cutting Pliers | 1        | £ 1000 V @ 🚰 🖯 💷 🚺 💌 |         |
|           |       |                 | 70 06 160           | Diagonal Cutter                | 1        | £ 1000 V @ 🚰 🕨       |         |
| 00 21 1   | 15 LE | 045175          |                     |                                |          |                      | 530     |



## **Electronics Pliers Sets**

for working on electronic components



00 20 16



00 20 16 P



00 20 16 P ESD 



00 20 17 



#### 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 hard-wearing 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 hardwearing 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

| Article No.    | EAN<br>4003773- | Contents  | ۵ <sup>۲</sup> ۵<br>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 02 125 / 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 /<br>Screwdrivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH 0 / PH 1         | 460                   |
| 00 20 18 ESD   | 051848          | 35 22 115 ESD / 77 02 115 ESD /<br>Screwdrivers 0.4 x 2.5 / 0.5 x 3.0 / 0.6 x 3.5 / 0.8 x 4.0 / PH 0 / PH 1 | 465                   |

## **KNIPEX Minis in belt pouch** 2 parts



00 20 72 V01

## 00 21 Tool Bag 24 parts

for electrical contractors, top model



- KNIPEX Minis as "little helpers" in a practical belt pouch
- 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

| Article No.  | EAN<br>4003773- |                 | Contents             | Quantity | ۲<br>ع |
|--------------|-----------------|-----------------|----------------------|----------|--------|
| 00 20 72 V01 | 070832          | KNIPEX Minis in | h belt pouch 2-piece |          | 350    |
|              |                 | 86 03 150       | Pliers Wrench        | 1        |        |
|              |                 | 87 01 125       | KNIPEX Cobra®        | 1        |        |

- contains 24 brand name quality tools, partly VDE tested according to DIN EN/IEC 60900, 1000 V
- comfortable bag of hard-wearing leather, with front bag, adjustable retaining loops and belt
- with galvanised 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<br>4003773- |                | Contents   |             | Quantity | Nominal size       |              | ۲<br>ع |
|-------------|-----------------|----------------|--|-------------|----------|--------------------|--------------|--------|
| 00 21 01 TL | 032694          | Tool Bag 24 pa | rts  |             |          |                    |              | 6990   |
|             |                 | 306125         | PUK <sup>®</sup> Junior Hacksaw                  | Haunstätter | 1        | 150 x 240 mm       |              |        |
|             |                 | 03 06 180      | Combination Pliers                               |             | 1        | 180 mm             | A 1000 V @ € |        |
|             |                 | 11 06 160      | Insulation Stripper                              |             | 1        | 160 mm             | <u> </u>     |        |
|             |                 | 16 20 165      | Dismantling Tool                                 |             | 1 165 mm | Ŵ                  |              |        |
|             |                 | 25 06 160      | Snipe Nose Side Cutting Pliers                   | Knipex      | 1        | 160 mm             | ≜1000V @ € ⊖ |        |
|             |                 | 70 06 160      | Diagonal Cutter                                  |             | 1        | 160 mm             | £ 1000 V 🖄 🚭 |        |
|             |                 | 98 52          | Cable Knife                                      |             | 1        | 185 mm             | £ 1000 V @ € |        |
|             |                 | 7165/50        | Plasterer's bowl                                 | Nölle       | 1        | 125 x 90 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                |              |        |
|             |                 | 361 252 1      | Electrician's Chisel                             | Depastaia   | 1        | 250 x 10 mm        |              |        |
|             |                 | 340 300 1      | Mason's Chisels                                  | Rennsteig   | 1        |                    |              |        |
|             |                 | 006100         |  |             | 1        | 0.4 x 2.5 x 80 mm  | •            |        |
|             |                 | 006110         | Screwdrivers for slotted screws                  |             | 1        | 0.5 x 3.0 x 100 mm | •            |        |
|             |                 | 006120         | Screwarivers for slotted screws                  |             | 1        | 1.0 x 5.5 x 125 mm | •            |        |
|             |                 | 006125         |  |             | 1        | 1.2 x 6.5 x 150 mm | •            |        |
|             |                 | 006152         | C  | Wera        | 1        | PH1 x 80 mm        | 0            |        |
|             |                 | 006154         | Screwdrivers for cross recessed Phillips® screws |             | 1        | PH 2 x 100 mm      | 0            |        |
|             |                 | 007620         | Screwdrivers for slotted screws                  |             | 1        | 1.0 x 6.0 x 125 mm | •            |        |
|             |                 | 110010         | Screwarivers for slotted screws                  |             | 1        | 1.2 x 6.5 x 150 mm | •            |        |
|             |                 | 465608         | Voltage Detector                                 |             | 1        | 0.5 x 3.0 x 70 mm  | 0            |        |

## Tool Bag 24 parts

apprentices tool bag for electrical contractors



00 21 02 SL

- comfortable bag of hard-wearing leather, with front bag, adjustable retaining loops and belt
- front, rear and lid made of calf leather, black
- semi-fold-out front with adjustable loops and exterior document compartment
- front additionally reinforced with aluminium brackets
- with galvanised steel base tray
- handle
- dimensions, interior (W x H x D): 420 x 250 x 160 mm

#### 00 21 02 SL

contains 24 brand name quality tools, partly VDE tested according to DIN EN/IEC 60900, 1000 V

00 21 02 LE without tools

| Article No. | EAN<br>4003773- |                | Contents                        |             | Quantity | Nominal size       |   | ے<br>م |
|-------------|-----------------|----------------|---------------------------------|-------------|----------|--------------------|---|--------|
| 00 21 02 SL | 050162          | Tool Bag 24 pa | irts                            |             |          |                    |   | 6980   |
|             |                 | 306125         | PUK <sup>®</sup> Junior Hacksaw | Haunstätter | 1        | 150 x 240 mm       |   |        |
|             |                 | 03 05 180      | Combination Pliers              |             | 1        | 180 mm             |   |        |
|             |                 | 11 05 160      | Insulation Stripper             |             | 1        | 160 mm             | MM  |        |
|             |                 | 16 20 165      | Dismantling Tool                | Kningy      | 1        | 165 mm             | /vvv\   |        |
|             |                 | 25 05 160      | Snipe Nose Side Cutting Pliers  | Knipex      | 1        | 160 mm             | $\Theta \blacksquare \blacksquare \blacksquare$ |        |
|             |                 | 70 05 160      | Diagonal Cutter                 |             | 1        | 160 mm             |   |        |
|             |                 | 98 52          | Cable Knife                     |             | 1        | 185 mm             | 🛧 1000 V 🖄 😭                                    |        |
|             |                 | 7165/50        | Plasterer's bow                 | Nölle       | 1        | 125 x 90 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              |   |        |
|             |                 | 361 252 1      | Electrician's Chisel            | Rennsteig   | 1        | 250 x 10 mm        |   |        |
|             |                 | 340 250 1      | Mason's Chisels                 | Refinistery | 1        | 250 mm             |   |        |
|             |                 | 031580         |                                 |             | 1        | 0.4 x 2.5 x 80 mm  | 🚖 1000 V 🖄 🚰 🖨                                  |        |
|             |                 | 031582         | Screwdrivers for slotted screws |             | 1        | 0.6 x 3.5 x 100 mm | 🛧 1000 V 🖄 🚭 🖨                                  |        |
|             |                 | 031587         | Screwarivers for slotted screws |             | 1        | 1.0 x 5.5 x 125 mm | 🚖 1000 V 🖄 🚭 🖨                                  |        |
|             |                 | 031588         |                                 |             | 1        | 1.2 x 6.5 x 150 mm | 🚖 1000 V 🖄 🖨 🖨                                  |        |
|             |                 | 031601         | Screwdrivers for cross recessed | Wera        | 1        | PH1 x 80mm         | 🚖 1000 V 🖄 🛃 🗘                                  |        |
|             |                 | 031603         | Phillips <sup>®</sup> screws    |             | 1        | PH2 x 100 mm       | 🚖 1000 V 🖄 🚭 🗘                                  |        |
|             |                 | 031611         | Screwdrivers for cross recessed |             | 1        | PZ1 x 80 mm        | 🚖 1000 V 🖄 🚰 🛟                                  |        |
|             |                 | 031613         | Pozidriv <sup>®</sup> screws    |             | 1        | PZ2 x 100 mm       | 🚖 1000 V 🖄 🚰 🛟                                  |        |
|             |                 | 005655         | Voltage Detector                |             | 1        | 0.5 x 3.0 x 70 mm  | 0   |        |
| 00 21 02 LE | 057499          |                |                                 |             |          |                    |   | 2970   |

## **1 Tool Box** 7 parts

for electrical contractors



#### 00 21 15

• 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

| Article No. | EAN<br>4003773- | -             | Contents   |        | Quantity | Nominal size       |                        | ۵'ک<br>g |
|-------------|-----------------|---------------|--|--------|----------|--------------------|------------------------|----------|
| 00 21 15    | 042853          | Tool Box 7 pa | arts   |        |          |                    |                        | 1520     |
|             |                 | 03 06 180     | Combination Pliers   |        | 1        | 180 mm             | 🛧 1000 V 🖄 🚭 💷 🚺 ► 🗨   |          |
|             |                 | 26 16 200     | Snipe Nose Side Cutting Pliers                               | Knipex | 1        | 200 mm             | A 1000 V 🖄 🚭 🕀 💷 🚺 ► 🖣 |          |
|             |                 | 70 06 160     | Diagonal Cutter  |        | 1        | 160 mm             | 🛧 1000 V 🖄 🚭 💌         |          |
|             |                 | 88 03 180     | KNIPEX Alligator®  |        | 1        | 180 mm             |                        |          |
|             |                 | 006100        | Screwdrivers for slotted screws                              |        | 1        | 0.4 x 2.5 x 80 mm  | £ 1000 V 🖄 🚭 🗢         |          |
|             |                 | 006115        | Sciewanivers for slotted sciews                              | Wera   | 1        | 0.8 x 4.0 x 100 mm | £ 1000 V 🖄 🚭 🖨         |          |
|             |                 | 006152        | Screwdrivers for cross recessed Phillips <sup>®</sup> screws | Weld   | 1        | PH1 x 80 mm        | 1000 V 🖄 🚅 🗘           |          |
| 00 21 15 LE | 045175          |               |  |        |          |                    |                        | 530      |



## **1** Tool Case "Electric" 20-parts



00 21 20

- 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 popper
- 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

| Article No. | EAN<br>4003773- |                | Contents                           |        | Quantity | Nominal size       |                       | ۲۵<br>g |
|-------------|-----------------|----------------|------------------------------------|--------|----------|--------------------|-----------------------|---------|
| 00 21 20    | 052166          | Tool Case "Ele | ctric" 20 parts                    |        |          |                    |                       | 7225    |
|             |                 | 03 06 180      | Combination Pliers                 |        | 1        | 180 mm             | 1000 V @ 🚰 🛲 💌        |         |
|             |                 | 26 16 200      | Snipe Nose Side Cutting Pliers     |        | 1        | 200 mm             | 1000 V @ 🚰 🖨 আআ 🕨 🗨   |         |
|             |                 | 26 26 200      | Shipe Nose Side Cutting Pliers     |        | 1        | 200 mm             | ≙ 1000 V 준 ∡40° ⊖  ▶◀ |         |
|             |                 | 70 06 160      | Diagonal Cutter                    |        | 1        | 160 mm             | A 1000 V 🙈 🛋 💌        |         |
|             |                 | 74 06 200      | High Leverage Diagonal Cutter      |        | 1        | 200 mm             |                       |         |
|             |                 | 95 16 200      | Cable Shears                       | Knipex | 1        | 200 mm             | £ 1000 V 🖄 🚭 🤁 📲 🖫    |         |
|             |                 | 98 56          | Cable Knife                        |        | 1        | 185 mm             | £ 1000 V 🖄 🚭          |         |
|             | 8               | 86 03 180      | Pliers Wrench                      |        | 1        | 180 mm             |                       |         |
|             |                 | 87 03 250      | KNIPEX Cobra®                      |        | 1        | 250 mm             |                       |         |
|             |                 | 12 40 200      | Self-Adjusting Insulation Stripper |        | 1        | 200 mm             | MM                    |         |
|             |                 | 16 80 125      | Universal Dismantling Tool         |        | 1        | 125 mm             |                       |         |
|             |                 | 006100         |                                    |        | 1        | 0.4 x 2.5 x 80 mm  | £ 1000 V 🖄 🚭 🖨        |         |
|             |                 | 006115         | Screwdrivers for slotted screws    |        | 1        | 0.8 x 4.0 x 100 mm | <u> </u>              |         |
|             |                 | 006120         | Screwurivers for slotted screws    |        | 1        | 1.0 x 5.5 x 125 mm | £ 1000 V 🖄 🚭 🖨        |         |
|             |                 | 006125         |                                    |        | 1        | 1.2 x 6.5 x 150 mm | <u> </u>              |         |
|             |                 | 006152         | Screwdrivers for cross recessed    | Wera   | 1        | PH1 x 80 mm        | 1000 V 🖄 🚭 🗘          |         |
|             |                 | 006154         | Phillips <sup>®</sup> screws       |        | 1        | PH2 x 100 mm       | 1000 V 🖄 🚭 🗘          |         |
|             | 00              | 006162         | Screwdrivers for cross recessed    |        | 1        | PZ1 x 80 mm        | ≙ 1000 V 🖄 🚭 🛟        |         |
|             |                 | 006164         | Pozidriv <sup>®</sup> screws       |        | 1        | PZ2 x 100 mm       | ☆ 1000 V 🏤 🚭 🛟        |         |
|             |                 | 005655         | Voltage Detector                   |        | 1        | 0.5 x 3.0 x 70 mm  | 0                     |         |
| 00 21 20 LE | 044567          |                |                                    |        |          |                    |                       | 4485    |

## **Tool Case for electrical contractors**

23 parts



- $\mbox{-}$  contains 23 brand name quality 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

| Article No. | EAN<br>4003773- |                 | Contents  |        | Quantity | Nominal size       |                       | ے<br>م |
|-------------|-----------------|-----------------|---|--------|----------|--------------------|-----------------------|--------|
| 00 21 30    | 051084          | Tool Case for e | lectrical contractors 23 parts                      |        |          |                    |                       | 9440   |
|             |                 | 03 06 180       | Combination Pliers                                  |        | 1        | 180 mm             | 🛧 1000 V 🖄 🚰 🏧 🚺 🕨 🖣  |        |
|             |                 | 26 16 200       | Snipe Nose Side Cutting Pliers                      |        | 1        | 200 mm             | 1000 V 🖄 🚰 🕀 আ∭ 🕨 ◄   |        |
|             |                 | 26 26 200       | Shipe Nose Side Cutting Fliers                      |        | 1        | 200 mm             | â 1000 V 준 ∡40° ⊖ ∭ 💌 |        |
|             |                 | 70 06 125       | Diagonal Cutter                                     |        | 1        | 125 mm             | <u> </u>              |        |
|             |                 | 70 06 160       | Diagonal Cutter                                     |        | 1        | 160 mm             |                       |        |
|             |                 | 92 27 62        | Precision Tweezers                                  | Kalan  | 1        | 150 mm             | 会 1000 V  때Ⅲ          |        |
|             |                 | 98 56           | Cable Knife   | Knipex | 1        | 185 mm             | <b>会 1000 V @ €</b>   |        |
|             |                 | 00 11 03        | Control Cabinet Key                                 |        | 1        | 76 mm              |                       |        |
|             |                 | 12 40 200       | Self-Adjusting Insulation Stripper                  |        | 1        | 200 mm             | AAAA                  |        |
|             |                 | 16 80 125       | Universal Dismantling Tool                          |        | 1        | 125 mm             | AMM                   |        |
|             |                 | 86 03 180       | Pliers Wrench                                       |        | 1        | 180 mm             |                       |        |
|             |                 | 87 03 250       | KNIPEX Cobra®                                       |        | 1        | 250 mm             |                       |        |
|             |                 | 006100          |   |        | 1        | 0.4 x 2.5 x 80 mm  | £ 1000 V ﷺ €          |        |
|             |                 | 006110          |   |        | 1        | 0.6 x 3.5 x 100 mm | ☆ 1000 V 🖄 🚭 🖨        |        |
|             |                 | 006115          |   |        | 1        | 0.8 x 4.0 x 100 mm | £ 1000 V ﷺ €          |        |
|             |                 | 006120          | Screwdrivers for slotted screws                     |        | 1        | 1.0 x 5.5 x 125 mm | £ 1000 V ﷺ €          |        |
|             |                 | 006125          |   | Wera   | 1        | 1.2 x 6.5 x 150 mm | £ 1000 V ﷺ €          |        |
|             |                 | 006130          |   |        | 1        | 1.2 x 8.0 x 175 mm | £ 1000 V ﷺ €          |        |
|             |                 | 006150          |   |        | 1        | PH0 x 80 mm        | <u> </u>              |        |
|             |                 | 006152          | Screwdrivers for cross recessed<br>Phillips® screws |        | 1        | PH1 x 80 mm        | <u> </u>              |        |
|             |                 | 006154          | r mmps sciews                                       |        | 1        | PH2 x 100 mm       | <u> </u>              |        |
|             |                 | 006162          | Screwdrivers for cross recessed                     |        | 1        | PZ1 x 80 mm        | <u> </u>              |        |
|             |                 | 006164          | Pozidriv <sup>®</sup> screws                        |        | 1        | PZ2 x 100 mm       | 🚖 1000 V 🖄 🚰 🛟        |        |

## Belt Pouch for two pliers



00 19 72 LE



### Belt Tool Pouch empty



00 19 73 LE

- for two pliers up to 150 mm length
- made of hard-wearing polyester fabric
- with hook and loop fastener
- with elastic side holder for flash lamp, pen or suchlike
- with practical belt loop

| Article No. | EAN      | Width | Height | Depth | ۲٦ |
|-------------|----------|-------|--------|-------|----|
|             | 4003773- | mm    | mm     | mm    | g  |
| 00 19 72 LE | 070191   | 65    | 155    | 25    | 65 |

- made of hard-wearing polyester fabric and leather
- with pockets for up to 8 tools
- tool loops made of leather, riveted
- with snap hook

| Article No. | EAN      | Width | Height | Depth | ۲۵  |
|-------------|----------|-------|--------|-------|-----|
|             | 4003773- | mm    | mm     | mm    | g   |
| 00 19 73 LE | 072065   | 170   | 235    | 75    | 210 |

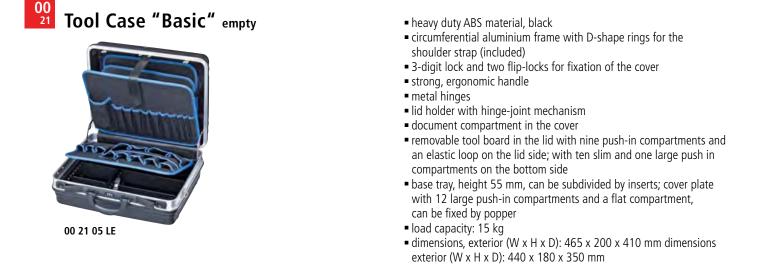
## <sup>00</sup><sub>21</sub> Tool Bag "New Classic Basic" empty</sub>



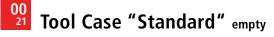
- comfortable bag of hard-wearing leather, with front bag, adjustable retaining loops and belt
- front, rear and lid made of calf leather, black
- front additionally reinforced with aluminium brackets
- semi-fold-out front with adjustable loops and exterior document compartment
- with galvanised steel base tray
- handle
- dimensions, exterior (W x H x D): 450 x 300 x 190 mm; dimensions, interior (W x H x D): 420 x 250 x 160 mm

00 21 02 LE

| Article No. | EAN<br>4003773- | exterior (interior) width mm | Dimension<br>exterior (interior) height<br>mm | exterior (interior) depth<br>mm | ۲<br>g |
|-------------|-----------------|------------------------------|---|---------------------------------|--------|
| 00 21 02 LE | 057499          | 450 (420)                    | 300 (250)                                     | 190 (160)                       | 2970   |



| Article No. | EAN      | exterior (interior) width | Dimension                     | exterior (interior) depth | ۲    |
|-------------|----------|---------------------------|-------------------------------|---------------------------|------|
|             | 4003773- | mm                        | exterior (interior) height mm | mm                        | ع    |
| 00 21 05 LE | 056904   | 465 (440)                 | 200 (180)                     | 410 (350)                 | 5680 |





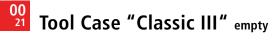
- heavy duty ABS material, black
- with circumferential double aluminium frame
- register hinges working as lid holder
- strong, ergonomic handle
- two flip-locks, lockable
- one removable tool board in the lid with 15 push-in compartments on the bottom side and six big push-in compartment and a clamp compartment (400 mm width) on the lid side, fixed by popper
- 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 LE

| Article No. | EAN<br>4003773- | exterior (interior) width mm | Dimension<br>exterior (interior) height<br>mm | exterior (interior) depth<br>mm | ۵'۵<br>g |
|-------------|-----------------|------------------------------|---|---------------------------------|----------|
| 00 21 20 LE | 044567          | 480 (460)                    | 175 (170)                                     | 370 (310)                       | 4485     |

| Tool Case "Classic II" empty | <ul> <li>heavy duty ABS material, black</li> <li>with circumferential double aluminium frame</li> <li>register hinges working as lid holder</li> <li>sturdy multi-component handle with grip recesses</li> <li>two flip-locks, lockable</li> <li>document compartment in the cover</li> <li>one removable tool board in the lid with CP7-tool holder<br/>(thickness 11 mm) on the bottom side</li> <li>one tool board in the lid with CP7-tool holder (thickness 11 mm)<br/>on the lid side and CP7-tool holder (thickness 11 mm)<br/>on the lid side and CP7-tool holder (thickness 15 mm) on the<br/>bottom side</li> <li>base tray, height 58 mm, can be subdivided by flexible inserts;<br/>cover plate with CP7-tool holder (thickness 25 mm) on the lid side,<br/>can be fixed by popper</li> <li>cover and tool plate made of Con-Pearl<sup>®</sup> material</li> <li>30 kg maximum load</li> </ul> |
|------------------------------|--|
| 00 21 32 LE                  | <ul> <li>30 kg maximum load</li> <li>dimensions, exterior(W x H x D): 480 x 177 x 370 mm<br/>dimensions, interior (W x H x D): 460 x 170 x 310 mm</li> </ul>   |

| Article No. | EAN<br>4003773- | exterior (interior) width<br>mm | Dimension<br>exterior (interior) height<br>mm | exterior (interior) depth<br>mm | ۵'ک<br>g |  |
|-------------|-----------------|---------------------------------|---|---------------------------------|----------|--|
| 00 21 32 LE | 057536          | 480 (460)                       | 180 (165)                                     | 365 (300)                       | 5235     |  |





- heavy duty ABS material, black
- extra large in height, width and depth
- 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 tool board in the lid with 13 push-in compartments on the bottom side and twelve push-in compartments as well as a clamp compartment (width 400 mm) on the lid side
- base tray, height 88 mm, can be subdivided by flexible inserts; cover plate with 15 push-in compartments and a clamp compartment (width 400 mm), can be fixed by 2 poppers
- cover and tool plate made of Con-Pearl<sup>®</sup> material
- 30 kg maximum load
- dimensions, exterior (W x H x D): 490 x 205 x 420 mm dimensions, interior (W x H x D): 470 x 180 x 360 mm

| Article No. EAN exterior (interior) width exterior (interior) height mm mm | exterior (interior) depth<br>mm | ۵۵<br>g |
|--|---------------------------------|---------|
| <b>00 21 33 LE</b> 057543 490 (470) 205 (180)                              | 420 (360)                       | 5620    |

**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

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
- 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<br>4003773- | exterior (interior) width<br>mm    | Dimension<br>exterior (interior) height<br>mm | exterior (interior) depth<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|-------------|-----------------|------------------------------------|---|---------------------------------|-----------------------|
| 00 21 40 LE | 057673          | 490 (445)                          | 255 (105 + 105)                               | 410 (350)                       | 7550                  |
|             |                 |                                    |   |                                 |                       |
| 00 21 40 T  | 062981          | Trolley for rolling case transport |   |                                 |                       |

## Tool Case "BIG Twin-Move"

with integrated rollers and telescopic handle empty



- 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 to 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
- dimensions, exterior (W x H x D): 510 x 270 x 410 mm
- dimensions, lid, interior (W x H x D): 480 x 105 x 370 mm
- dimensions, base, interior (W x H x D): 445 x 105 x 330 mm







| Article No. | EAN<br>4003773- | exterior (interior) width<br>mm | Dimension<br>exterior (interior) height<br>mm | exterior (interior) depth<br>mm | ۲<br>ع |
|-------------|-----------------|---------------------------------|---|---------------------------------|--------|
| 00 21 41 LE | 071549          | 510 (480/445)                   | 270 (105)                                     | 410 (370/330)                   | 8600   |



#### 00 19 20

for testing the self-locking function of the "Alligator®" and "Cobra®" Water Pump Pliers; steady stand, high stability; without pliers

#### 00 19 20 T

for testing the self-locking function of the "Alligator®" and "Cobra®" Water Pump Pliers; collapsible for space saving transport; without pliers

#### 00 19 21 T

for testing the ratchet principle of Pliers Wrenches; can be fixed on the wall; without pliers

| Article No. | EAN<br>4003773- | Width<br>mm | Height<br>mm | Depth<br>mm | ے<br>ع |
|-------------|-----------------|-------------|--------------|-------------|--------|
| 00 19 20    | 024637          | 230         | 165          | 310         | 1385   |
| 00 19 20 T  | 031192          | 140         | 225          | 135         | 810    |
| 00 19 21 T  | 027461          | 85          | 85           | 150         | 728    |



## Sales Display



00 19 24

for 5 x 6 pliers

- small size, minimum space required at the point of sales
- with informative header and slide-in strip for product detail labels
- assortment on request
- when ordering, do always ask for product detail header (see table) and product detail labels
- without pliers
- Material: steel wire, silver powder coated



C320 00187

| Article No. | EAN<br>4003773- | Width<br>mm                                | Height<br>mm                                     | Depth<br>mm | ۲۵<br>g |  |  |  |
|-------------|-----------------|--|--|-------------|---------|--|--|--|
| 00 19 24    | 029656          | 325  | 415  | 190         | 925     |  |  |  |
|             |                 |  |  |             |         |  |  |  |
| C320 00110  | 051473          | Header general programme                   | der general programme                            |             |         |  |  |  |
| C320 00187  | 603009          | Header Comfort, for pliers with multi-comp | r Comfort, for pliers with multi-component grips |             |         |  |  |  |

208

## 00 19 Sales Display



00 19 25

• for 8 x 7 pliers

- solid style; can be fixed on tool bar systems, also suitable as counter display
- with explanatory header
- assortment on request
- when ordering do always ask for product detail header (see table)
- without pliers
- Material: sheet steel / steel wire, silver powder coated



C320 00231

| Article No. | EAN<br>4003773- | Width<br>mm                               | Height<br>mm  | Depth<br>mm | ۵ <sup>۲</sup> ۵<br>g |  |
|-------------|-----------------|---|---|-------------|-----------------------|--|
| 00 19 25    | 014027          | 490                                       | 400   | 310         | 4140                  |  |
|             |                 |   |   |             |                       |  |
| C320 00132  | 601807          | Header general programme                  |   |             |                       |  |
| C320 00176  | 602927          | Header Comfort, for pliers with multi-com | ader Comfort, for pliers with multi-component grips |             |                       |  |
| C320 00231  | 051428          | Header Precision Circlip Pliers 48/49     |   |             |                       |  |

## Rotary Sales Stand

KNIPEX

- for 16 x 3 pliers
- attractive, compact rotary construction for the counter
- with 16 hooks 00 19 33
- assortment on request
- when ordering, do always ask for product detail labels
- without pliers
- Material: sheet steel / steel wire, silver powder coated

| Article No. | EAN      | Diameter | Height | ۲    |
|-------------|----------|----------|--------|------|
|             | 4003773- | mm       | mm     | g    |
| 00 19 28    | 032083   | 400      | 610    | 5950 |

## <sup>00</sup> <sup>19</sup> Tool Bars (Pegboards) and Accessories



00 19 30

00 19 30 66

#### 00 19 30

for the promotional, extensive product presentation; completely with supports, 5 peg boards, shelf and illuminated transparent advertising fascia panel; can be equipped either with pliers on hooks, carded pliers and/or sales displays; with power cable and 230 V plug; Material: sheet steel/ steel tubing, silver powder coated

#### 00 19 30 3

for the promotional, extensive product presentation; completely with supports, 5 peg boards, shelf; without illuminated transparent advertising facia; can be equipped either with pliers on hooks, carded pliers and/or sales displays; Material: sheet steel/ steel tubing, silver powder coated

#### 00 19 30 66

for the space saving presentation; completely with supports, 5 peg boards, shelf; without illuminated transparent advertising fascia panel; with magnetic advertising fascia panel; can be equipped either with pliers on hooks, carded pliers and/or sales displays; Material: sheet steel/ steel tubing, silver powder coated





00 19 30 2

| Article No. | EAN<br>4003773- |  | Width<br>mm | Height<br>mm | Depth<br>mm | ۵ <sup>۱</sup> ۵<br>g |
|-------------|-----------------|--|-------------|--------------|-------------|-----------------------|
| 00 19 30    | 024644          | Tool Bar with illuminated fascia panel                 | 1000        | 2200         | 500         | 58000                 |
| 00 19 30 3  | 052524          | Toolbar without illuminated fascia panel               | 1000        | 2200         | 500         | 47000                 |
| 00 19 30 66 | 055211          | Tool Bar   | 660         | 2200         | 500         | 40000                 |
| 00 19 30 2  | 046783          | Illuminated fascia panel, to affix to tool bar systems | 1000        | 200          | 400         | 9140                  |
| 00 19 30 15 | 071891          | Magnetic label for tool bar                            | 980         | 100          |             | 310                   |
| 00 19 30 16 | 071907          | Magnetic label for tool bar                            | 980         | 100          |             | 310                   |
| 00 19 30 19 | 071938          | Magnetic label for tool bar                            | 980         | 200          |             | 610                   |
| 00 19 30 17 | 071914          | Magnetic label for tool bar 00 19 30 66                | 650         | 100          |             | 410                   |
| 00 19 30 18 | 071921          | Magnetic label for tool bar 00 19 30 66                | 650         | 100          |             | 410                   |
| 00 19 30 20 | 071945          | Magnetic label for tool bar 00 19 30 66                | 650         | 200          |             | 410                   |

### <sup>00</sup> <sup>19</sup> Show-Cabinets for product presentation

for assembly to tool bar systems





- with two glass sliding doors, lockable
- illumination unit with plug for series connection
- with power cable and 230 V plug
- Material: aluminium section, silver colour

#### 00 19 30 VIT

hanging show-cabinet for assembly on tool bar systems; with shelf, top cover and transparent advertising fascia panel; easy to assemble collapsible frame construction

#### 00 19 30 VIT 1

basic show-cabinet for assembly to tool bar systems; with top cover and transparent advertising fascia panel

#### 00 19 30 VIT 2

unit show-cabinet for assembly to tool bar systems, for extension of basic show-cabinet 00 19 30 VIT1; with top cover and transparent advertising fascia panel

00 19 30 VIT

00 19 30 VIT 1

| Article |            | EAN<br>4003773- | Designation   | Width<br>mm | Height<br>mm | Depth<br>mm | ۵ <sup>۲</sup> ۵<br>g |
|---------|------------|-----------------|---|-------------|--------------|-------------|-----------------------|
| 00 19   | 9 30 VIT   | 034186          | Hanging Show-Cabinet for Tool Bar                     | 1000        | 1200         | 400         | 39000                 |
| 00 19   | 9 30 VIT 1 | 048978          | Basic Show-Cabinet for Product Presentation           | 1000        | 2000         | 400         | 59000                 |
| 00 19   | 9 30 VIT 2 | 048985          | Unit Show-Cabinet for 00 19 30 VIT - Expansion Module | 1000        | 2000         | 400         | 51000                 |

0

| Hooks for p | egboards                 |  |
|-------------|--------------------------|--|
|             |                          |  |
| 00 19 31    | 00 19 35 1<br>00 19 35 3 |  |
| 70 0K 140   |                          |  |

00 19 33

00 19 33 2

#### 00 19 31

160 mm length; for 6 pliers, with face plate for label; when ordering, do always ask for product detail labels

#### 00 19 33

90 mm length; for 3 pliers, with faceplate for label; when ordering, do always ask for product detail labels

#### 00 19 33 2

200 mm length; heavy duty for mounting pipe wrenches, etc.; with pivoting clamping device for easy fastening and release

#### 00 19 35 1 / 00 19 35 3

200 mm length; for self-service packs with Euro standard perforations; with pivoting clamping device for easy fastening and release

#### 00 19 35 2

50 mm length; for self-service (carded) packs and leaflets with Euro standard perforations

Depth

90

52

80

| Article No. | EAN<br>4003773- | Designation   | Hole spacing<br>mm | Depth<br>mm | ۲۵<br>g |
|-------------|-----------------|---|--------------------|-------------|---------|
| 00 19 31    | 014874          | for 6 pliers  | 30                 | 160         | 93      |
| 00 19 33    | 014881          | for 3 pliers  | 30                 | 90          | 70      |
| 00 19 33 2  | 042112          | for large size water pump pliers, pipe wrenches, etc. | 30                 | 200         | 150     |
| 00 19 35 1  | 045168          | for self-service packs                                | 25                 | 200         | 93      |
| 00 19 35 2  | 028284          | for brochures + carded tools                          | 30                 | 50          | 10      |
| 00 19 35 3  | 051787          | for self-service packs                                | 30                 | 200         | 95      |

00 19 35 2

## Brochure Holder for pegboards

- for approx. 250 A4-size leaflets
- Material: steel wire, silver powder coated

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00 19 36

| Article No. | EAN<br>4003773- | Width<br>mm | Height<br>mm |  |
|-------------|-----------------|-------------|--------------|--|
| 00 19 36    | 024682          | 230         | 290          |  |



# <sup>00</sup> Pliers Racks for pegboards



00 19 34



00 19 34 1

00 19 32 for 3 x 6 pliers

00 19 34 for 5 x 6 pliers

00 19 34 1 for 5 x 6 carded pliers; with header sign

00 19 34 2 for 15 x 6 pliers



00 19 34 2

| Article No. | EAN<br>4003773- | Designation             | Width<br>mm | Height<br>mm | Depth<br>mm | ۲٦<br>g |
|-------------|-----------------|-------------------------|-------------|--------------|-------------|---------|
| 00 19 32    | 024651          | for 3 x 6 pliers        | 195         | 98           | 175         | 344     |
| 00 19 34    | 024668          | for 5 x 6 pliers        | 325         | 98           | 175         | 400     |
| 00 19 34 1  | 051824          | for 5 x 6 carded pliers | 480         | 200          | 225         | 1065    |
| 00 19 34 2  | 052364          | for 15 x 6 pliers       | 995         | 145          | 215         | 2250    |

### <sup>00</sup> <sup>19</sup> Sales Displays





**00 19 34 3** for pliers finish 0; 1; 3 or 4

**00 19 34 4** for pliers finish 2; 5 or 6

| Article No. | EAN<br>4003773- | Designation                                    | Width<br>mm | Height<br>mm | Depth<br>mm | ۲۵<br>g |
|-------------|-----------------|--|-------------|--------------|-------------|---------|
| 00 19 34 3  | 054450          | for 3 x 6 pliers; for pliers finish 0/1/3 or 4 | 240         | 320          | 310         | 2345    |
| 00 19 34 4  | 054467          | for 3 x 6 pliers; for pliers finish 2/5/6      | 240         | 320          | 310         | 2340    |
|             |                 |  |             |              |             |         |
| C320 00275  | 054535          | Header Precision Circlip Pliers 48/49          |             |              |             |         |
| C320 00286  | 054504          | Header Concretors' Nippers                     |             |              |             |         |
| C320 00297  | 054481          | Header Cobra®; Pliers Wrenches                 |             |              |             |         |
| C320 00319  | 054498          | Header Stripping, Crimping                     |             |              |             |         |
| C320 00330  | 054511          | Header General Programme                       |             |              |             |         |
| C320 00352  | 060284          | Header Multiple Slip Joint Spanners            |             |              |             |         |
| C320 00363  | 060291          | Header Self-adjusting Insulation Strippers     |             |              |             |         |
| C320 00429  | 062271          | Header for 74 12                               |             |              |             |         |
| C320 00451  | 063032          | Header Cobra® ES                               |             |              |             |         |
| C320 00462  | 063049          | Header SmartGrip <sup>®</sup>                  |             |              |             |         |
| C320 00517  | 065869          | Header Lineman's Pliers                        |             |              |             |         |
| C320 00528  | 065876          | Header Insulated Pliers Wrenches               |             |              |             |         |
| C320 00605  | 070214          | Header KNIPEX Alligator®                       |             |              |             |         |

### **SALES AIDS**







C320 00297

C320 00275



C320 00330



C320 00352



C320 00462



C320 00517



C320 00605

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| 00 11 04       | 188     | 00 21 41 LE  | 207     | 13 72 160 SB | 33     | 30 21 190                  | 44     | 44 20 J51 | 58 | 50 01 250     | 62     | 74 02 200     | 81     |
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| 00 19 19 V11   | 191     | 03 00 200    | 22      | 16 40 150    | 35     | 32 23 135                  | 45     | 45 10 170 | 58 | 64 42 115     | 69     | 74 21 250     | 81     |
| 00 19 19 V12   | 191     | 03 00 250    | 22      | 16 49 150    | 35     | 32 31 135                  | 45     | 45 21 200 | 58 | 64 52 115     | 69     | 74 22 200     | 81     |
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| 00 19 20       | 208     | 03 01 160    | 22      |              | 36     | 33 03 160                  | 45     | 46 10 A6  | 59 | 64 62 120 ESD | 70     | 74 91 250     |        |
|                |         |              |         | 16 60 100 SB |        |                            |        |           |    |               |        |               | 79     |
| 00 19 20 T     | 208     | 03 01 180    | 22      | 16 65 125 SB | 37     | 34 12 130                  | 46     | 46 11 A0  | 57 | 64 72 120     | 69     | 75 02 125     | 82     |
| 00 19 21 T     | 208     | 03 01 200    | 22      | 16 80 125 SB | 37     | 34 12 130 ESD              | 47     | 46 11 A1  | 57 | 67 01 140     | 71     | 75 12 125     | 82     |
| 00 19 24       | 208     | 03 01 250    | 22      | 16 85 125 SB | 37     | 34 22 130                  | 46     | 46 11 A2  | 57 | 67 01 160     | 71     | 75 22 125     | 82     |
| 00 19 25       | 209     | 03 02 160    | 22      | 19 01 130    | 38     | 34 22 130 ESD              | 47     | 46 11 A3  | 57 | 67 01 200     | 71     | 75 52 125     | 82     |
| 00 19 28       | 209     | 03 02 180    | 22      | 19 03 130    | 38     | 34 32 130                  | 46     | 46 11 A4  | 57 | 67 05 140     | 71     | 76 01 125     | 83     |
| 00 19 28       | 192     | 03 02 200    | 22      | 20 01 125    | 38     | 34 32 130<br>34 32 130 ESD | 40     | 46 11 G0  | 59 | 67 05 160     | 71     | 76 03 125     | 83     |
|                |         |              |         |              |        |                            |        |           |    |               |        |               |        |
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|                |         |              |         |              |        |                            |        |           |    |               |        |               |        |
| 00 19 30 18    | 210     | 03 06 200    | 22/157  | 20 05 140    | 38     | 35 31 115                  | 48     | 46 13 A2  | 57 | 70 01 110     | 73     | 77 02 115     | 84     |
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| 00 19 30 VIT   | 211     | 03 07 250    | 22/157  | 22 01 140    | 39     | 35 42 115 ESD              | 49     | 46 20 A51 | 59 | 70 01 180     | 73     | 77 12 115     | 84     |
| 00 19 30 VIT 1 | 211     | 08 05 110    | 20      | 22 01 160    | 39     | 35 52 145                  | 48     | 46 20 A61 | 59 | 70 02 125     | 73     | 77 12 115 ESD | 85     |
|                |         |              |         |              |        |                            |        |           |    |               |        |               |        |
| 00 19 30 VIT 2 | 211     | 09 01 240    | 23      | 22 01 180    | 39     | 35 62 145                  | 48     | 46 21 A01 | 57 | 70 02 140     | 73     | 77 21 115     | 84     |
| 00 19 31       | 212     | 09 02 240    | 23      | 22 02 140    | 39     | 35 72 145                  | 48     | 46 21 A11 | 57 | 70 02 160     | 73     | 77 21 130     | 84     |
| 00 19 32       | 213     | 09 11 240    | 23      | 22 02 160    | 39     | 35 82 145                  | 48     | 46 21 A21 | 57 | 70 02 180     | 73     | 77 22 115     | 84     |
| 00 19 33       | 212     | 09 12 240    | 23      | 22 05 140    | 39     | 36 12 130                  | 50     | 46 21 A31 | 57 | 70 04 140     | 73     | 77 22 115 ESD | 85     |
| 00 19 33 2     | 212     | 11 01 160    | 24      | 22 05 160    | 39     | 36 22 125                  | 50     | 46 21 A41 | 57 | 70 05 125     | 73     | 77 22 130     | 84     |
|                |         |              |         |              |        |                            |        |           |    |               |        |               |        |
| 00 19 34       | 213     | 11 02 160    | 24      | 22 06 160    | 39/159 | 36 32 125                  | 50     | 46 23 A01 | 57 | 70 05 140     | 73     | 77 32 115     | 84     |
| 00 19 34 1     | 213     | 11 05 160    | 24      | 22 07 160    | 39/159 | 37 11 125                  | 51     | 46 23 A11 | 57 | 70 05 160     | 73     | 77 32 115 ESD | 85     |
| 00 19 34 2     | 213     | 11 06 160    | 24/157  | 23 01 140    | 39     | 37 13 125                  | 51     | 46 23 A21 | 57 | 70 05 180     | 73     | 77 42 115     | 84     |
| 00 19 34 3     | 214     | 11 07 160    | 24/157  | 25 01 125    | 40     | 37 21 125                  | 51     | 46 23 A31 | 57 | 70 06 125     | 73/161 | 77 42 115 ESD | 85     |
| 00 19 34 4     | 214     | 11 12 160    | 24      | 25 01 140    | 40     | 37 23 125                  | 51     | 46 29 A51 | 59 | 70 06 140     | 73/161 | 77 42 130     | 84     |
| 00 19 35 1     | 212     | 11 15 160    | 24      | 25 01 160    | 40     | 37 31 125                  | 51     | 46 29 A61 | 59 |               | 73/161 |               | 84     |
| 00 19 35 2     | 212     | 11 17 160    | 24/157  | 25 02 140    | 40     | 37 33 125                  | 51     | 46 31 A02 | 57 |               | 73/161 |               | 85     |
|                |         |              |         | 25 02 140    |        |                            |        |           |    |               |        |               |        |
| 00 19 35 3     | 212     | 11 82 130    | 25      |              | 40     | 37 41 125                  | 51     | 46 31 A12 | 57 |               | 73/161 |               | 84     |
| 00 19 36       | 212     | 11 92 140    | 25      | 25 03 125    | 40     | 37 43 125                  | 51     | 46 31 A22 | 57 |               | 73/161 |               | 85     |
| 00 19 41       | 192     | 12 11 180    | 25      | 25 03 160    | 40     | 38 11 200                  | 53     | 46 31 A32 | 57 | 70 11 110     | 73     | 78 03 125     | 87     |
| 00 19 56       | 193     | 12 12 02     | 26      | 25 05 140    | 40     | 38 15 200                  | 53     | 46 31 A42 | 57 | 70 15 110     | 73     | 78 03 125 ESD | 88     |
| 00 19 57       | 193     | 12 12 06     | 26      | 25 05 160    | 40     | 38 21 200                  | 53     | 48 11 J0  | 60 | 70 26 160     | 73/161 | 78 13 125     | 87     |
| 00 19 72 LE    | 203     | 12 12 10     | 26      | 25 06 160    | 40/159 | 38 25 200                  | 53     | 48 11 J1  | 60 | 71 01 200     | 75     | 78 13 125 ESD | 88     |
| 00 19 73 LE    | 203     | 12 12 11     | 26      | 25 21 160    | 40     | 38 31 200                  | 53     | 48 11 J2  | 60 | 71 02 200     | 75     | 78 23 125     | 87     |
|                |         | 12 12 12     |         |              |        |                            |        |           |    | 71 12 200     | 75     |               |        |
| 00 20 01 V01   | 194     |              | 26      | 25 25 160    | 40     | 38 35 200                  | 53     | 48 11 J3  | 60 |               |        | 78 31 125     | 87     |
| 00 20 01 V02   | 194     | 12 19 02     | 26      | 25 26 160    | 40/159 | 38 41 190                  | 53     | 48 11 J4  | 60 | 71 21 200     | 75     | 78 41 125     | 87     |
| 00 20 01 V03   | 194     | 12 19 06     | 26      | 26 11 200    | 41     | 38 45 190                  | 53     | 48 21 J01 | 60 | 71 22 200     | 75     | 78 61 125     | 87     |
| 00 20 03 SB    | 193     | 12 19 10     | 26      | 26 12 200    | 41     | 38 71 200                  | 53     | 48 21 J11 | 60 | 71 31 200     | 75     | 78 61 125 ESD | 88     |
| 00 20 04 SB    | 193     | 12 19 11     | 26      | 26 13 200    | 41     | 38 91 200                  | 53     | 48 21 J21 | 60 | 71 32 200     | 75     | 78 71 125     | 87     |
| 00 20 09 V01   | 195     | 12 19 12     | 26      | 26 15 200    | 41     | 38 95 200                  | 53     | 48 21 J31 | 60 | 71 41 200     | 75     | 78 71 125 ESD | 88     |
| 00 20 10       | 195     | 12 19 180    | 25      | 26 16 200    | 41/160 | 40 04 180                  | 54     | 48 21 J41 | 60 | 71 72 460     | 76     | 78 81 125     | 87     |
| 00 20 11       | 195     | 12 21 180    | 25      | 26 17 200    | 41/160 | 40 04 250                  | 54     | 49 11 A0  | 61 | 71 72 610     | 76     | 78 91 125     | 87     |
| 00 20 12       | 195     | 12 29 180    |         | 26 21 200    | 41/100 | 41 04 180                  | 54     |           |    | 71 72 760     | 76     | 79 02 120     | 90     |
|                |         |              | 25      |              |        |                            |        | 49 11 A1  | 61 |               |        |               |        |
| 00 20 13       | 195     | 12 40 200    | 28      | 26 22 200    | 41     | 41 04 250                  | 54     | 49 11 A2  | 61 | 71 72 910     | 76     | 79 02 120 ESD | 91     |
| 00 20 15       | 196     | 12 42 195    | 29      | 26 23 200    | 41     | 41 04 300                  | 54     | 49 11 A3  | 61 | 71 79 460     | 76     | 79 02 125     | 90     |
| 00 20 16       | 197     | 12 49 01     | 28      | 26 25 200    | 41     | 41 14 250                  | 54     | 49 11 A4  | 61 | 71 79 610     | 76     | 79 02 125 ESD | 91     |
| 00 20 16 P     | 197     | 12 49 02     | 28      | 26 26 200    | 41/160 | 41 24 225                  | 54     | 49 21 A01 | 61 | 71 79 760     | 76     | 79 12 125     | 90     |
| 00 20 16 P ESD |         | 12 49 03     | 28      | 26 27 200    | 41/160 | 41 34 165                  | 54     | 49 21 A11 | 61 | 71 79 910     | 76     | 79 12 125 ESD | 91     |
| 00 20 17       | 197     | 12 49 21     | 20      | 27 01 160    | 41/100 | 42 14 280                  | 55     | 49 21 A21 | 61 | 71 82 950     | 77     | 79 22 120     | 90     |
|                |         |              |         |              |        |                            |        |           |    |               |        |               |        |
| 00 20 18       | 197     | 12 49 23     | 29      | 28 01 200    | 42     | 42 24 280                  | 55     | 49 21 A31 | 61 | 71 89 950     | 77     | 79 22 120 ESD | 91     |
| 00 20 18 ESD   | 197     | 12 50 200    | 28      | 28 21 200    | 42     | 42 34 280                  | 55     | 49 21 A41 | 61 | 72 01 140     | 78     | 79 22 125     | 90     |
| 00 20 72 V01   | 198     | 12 59 01     | 28      | 29 11 160    | 43     | 44 10 J5                   | 58     | 49 31 A0  | 61 | 72 01 160     | 78     | 79 22 125 ESD | 91     |
| 00 21 01 TL    | 198     | 12 59 02     | 28      | 29 21 160    | 43     | 44 10 J6                   | 58     | 49 41 A01 | 61 | 72 01 180     | 78     | 79 32 125     | 90     |
| 00 21 02 LE    | 203     | 12 62 180    | 30      | 29 25 160    | 43     | 44 11 J0                   | 56     | 50 00 130 | 62 | 72 02 125     | 78     | 79 32 125 ESD | 91     |
| 00 21 02 EL    | 199     | 12 64 180    | 30      | 30 11 140    | 43     | 44 11 J0<br>44 11 J1       | 56     | 50 00 160 |    | 72 11 160     | 78     | 79 42 125     | 90     |
|                |         |              |         |              |        |                            |        |           | 62 |               |        |               |        |
| 00 21 05 LE    | 204     | 12 69 21     | 30      | 30 11 160    | 44     | 44 11 J2                   | 56     | 50 00 180 | 62 | 72 21 160     | 78     | 79 42 125 ESD | 91     |
| 00 21 15       | 200     | 12 69 23     | 30      | 30 11 190    | 44     | 44 11 J3                   | 56     | 50 00 210 | 62 | 72 51 160     | 79     | 79 52 125     | 90     |
| 00 21 15 LE    | 196/200 | 12 69 31     | 30      | 30 13 140    | 44     | 44 11 J4                   | 56     | 50 00 225 | 62 | 74 01 140     | 81     | 79 52 125 ESD | 91     |
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