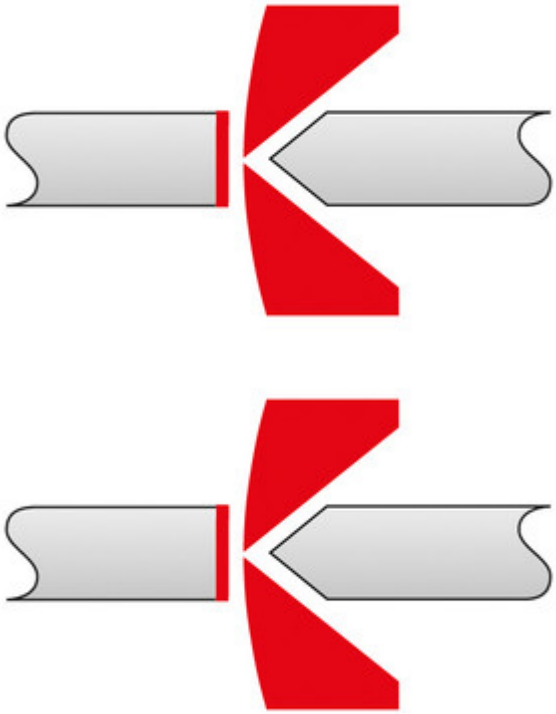
Frequently Asked Questions (FAQ)

Can I use pliers to flush cut hard material?

For physical reasons, hard material cannot be cut flush using pliers. Pliers used for flush cutting should not have any external bevel.



As a result of the one-sided cutting element, very large compressive forces are created on the side of the cutter edge when cutting with the tip. These forces bend the cutting edge or lead to nicks. Flush cutting that is free from burrs and does not damage the pliers cutters is only possible when cutting soft materials such as lead, copper, soft brass or plastic.

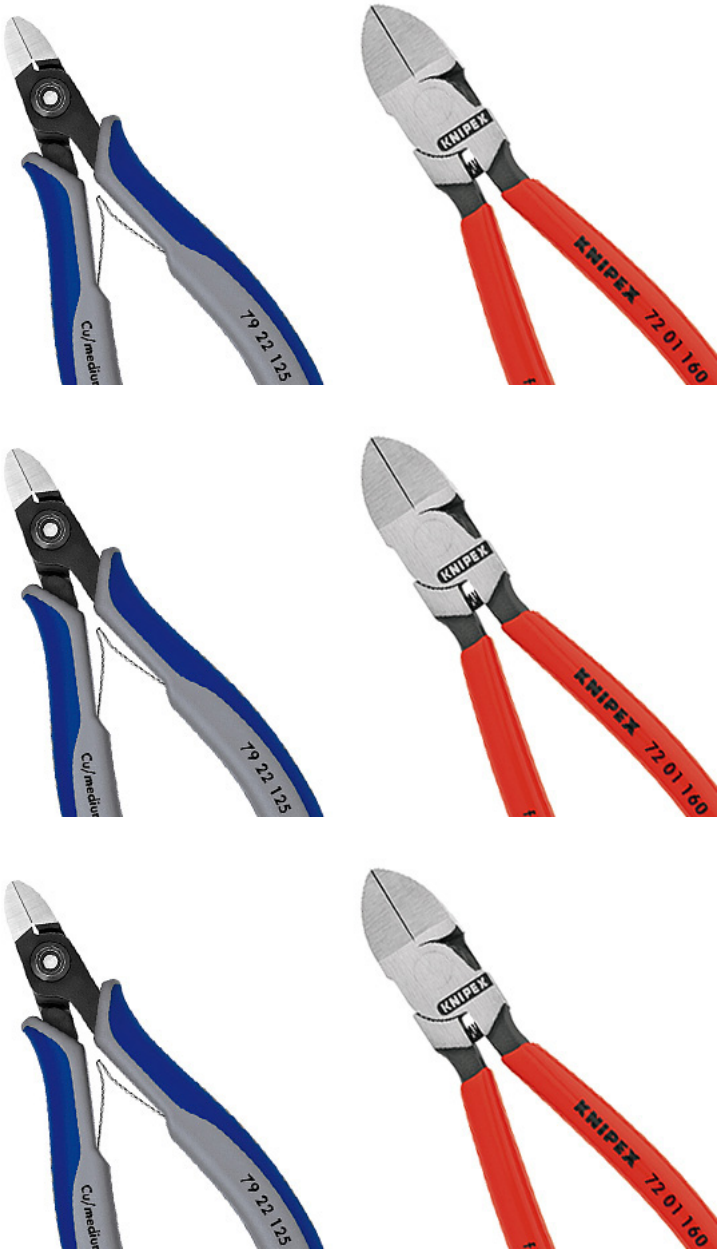
What can I use to flush cut cable ties?

Cable ties are usually made from quality plastics with high tensile forces. When they are cut using pliers, high frictional forces are therefore created between the plastic of the cable tie and the steel of the cutter.

The wider and thicker the cable tie, the greater these forces will be.

The surface of the cutters and their lip angle also have a great influence on the cutting forces created.

We recommend precision electronics diagonal cutters from the 79 range, e.g. 79 22 125 or diagonal cutters for plastic in the 72 range, e.g. 72 01 160.



The frequently used 78 models (Electronic *Super Knips*®) are almost at the limit of their load-bearing capacity when cutting cable ties, especially in the case of wide cable ties or when they are cut using a fast cutting movement: the speed increases the friction.

What is the difference between the blue and red and the red and yellow handles?

The blue and red handles are two-component handles which are more comfortable to use than dipped handles for example, and which are insulated against hot and cold temperatures; this makes them more pleasant to use in extreme conditions. The plastic used by KNIPEX also insulates against electricity.
If an electrician wishes or needs to work on electrical installations, however, then special regulations apply here. In Europe harmonised regulations have been specified for this, e.g. in the European standard EN 50110 – 1. These regulations apply to work on all electrical components that operate using mains power and which cannot be disconnected from the mains by pulling out the plug.
The EN 50110-1 prescribes tools for such cases in line with the pertinent standards.
The binding standard for Europe here is the EN 60900. This defines a large number of geometric and mechanical properties for such tools.
It also stipulates how these properties should be checked and how the tools are to be labelled. The dipped insulation and the yellow and red insulation for safety tools satisfy all of these requirements. Every pair of insulated KNIPEX pliers is checked for withstand voltage at 10,000 volts, for example in the final inspection, before it is placed on the market.

These requirements have not been taken into account in the blue and red handles; other factors have been considered during their design.
They have therefore been neither approved nor checked for electricians who need to work on electrical installations. If tools with blue and red handles which have no VDE approval are used on electrical installations, there is no insurance cover from the employer's liability insurance association in the event of an accident.

Are the blue and red handles also suitable for electricians?

In principle, the plastic that KNIPEX uses also insulates against electricity, but this property is not checked on the blue and red handles.
In addition they do not satisfy design features of the IEC 60900 such as the slip guard. As such, pliers with blue and red handles have not been approved for work on electrical installations or for work on live electrical equipment.

What do the forged characters on the pliers mean?

The small, forged lettering or combination of numbers and letters is used to ensure the traceability of the tools.
They provide us with information about the time they were forged.
It is the

Is it possible to sharpen the cutters of pliers?

Theoretically it is possible with a great deal of skill and using suitable tools such as fine whetstones or fine diamond files.
Under some circumstances this changes the geometry of the cutter, which generally worsens the cutting behaviour. In addition the handle width of the pliers is always narrowed when the cutters are sharpened.
The hardened cutter area is stripped and becomes ever thinner. If the cutters are sharpened using mechanical grinding, the introduction of heat during grinding may reduce the hardness.
Considerable time and risks are involved, so that sharpening is usually not worthwhile.

Are spare parts available for my pliers?

At KNIPEX we have spare parts for almost all tools with replaceable parts.
However spare parts are often not listed in the sales documents because they are very rarely needed. Please contact your specialist dealer.

Why do my combination pliers have a gap between the gripping jaws?

Combination pliers have (at least) two functions.

During their manufacture, it is necessary to decide which function is to take priority in the long term. In the case of combination pliers the cutting function takes priority. The gripping jaws may therefore have a small gap. How big the size of this gap may be is defined in ISO 57 46, the valid standard for combination pliers.
KNIPEX complies with these tolerances.

The authorised gripping jaw gap depends on size and is 0.4 mm for combination pliers with a length of 180 mm.

Are there special wire strippers for rubber cable?

For materials such as rubber cable we recommend Precision Insulation Strippers 12 12 xx.These pliers work with two precise pairs of blades which cut through the insulation across the entire circumference of the cable. They are therefore also ideal for difficult materials such as rubber, PTFE or silicone.

All in all there are over 40 special sets of blades for this type of pliers to suit the most diverse applications.

Why are my pliers going rusty, and what can I do to prevent this?

Steel starts to rust as soon as it comes into contact with water and oxygen.
If a water-resistant coating is applied, it will not rust.
Such layers may be an oil film, varnish or electroplated layer of non-rusting material such as nickel or chrome, for example.
An oil film is the simplest method of obtaining rust protection. It is particularly effective on a very smooth surface. For this reason the surfaces of pliers are sanded to finely polish them, and are sometimes even mirror polished.
Oil films wear off over time and must be reapplied regularly. Layers of varnish also wear off when the pliers are used intensively. However such intensive use generally prevents rust forming on the areas where the coat of varnish has worn away.
As a rule, care should be taken to store the pliers in as dry a place as possible.
A chrome plated option is worthwhile if condensation (e.g. in a service vehicle) is unavoidable. Almost all KNIPEX pliers are available with chrome plating.

What can you use to cut shrouds?

Usually the cutting of shrouds in sailing only becomes challenging in an emergency situation.
The sea is then generally rough and conditions are difficult – there is a risk of losing the boat.
Whether KNIPEX wire rope cutters 95 81 600 are suitable for this purpose should definitely be checked on a case by case basis. In principle the tool is suitable, but under the conditions specified we advise using a shroud blaster in emergency situations.

What can I use to cut thick (approx. 30 mm) mooring rope?

As long as this does not involve fibrous Kevlar rope, ropes right through to thick mooring rope can be cut using cable shears (e.g. 95 12 200). For ropes up to a diameter of 25 mm, the handy hose and conduit pipe shears 90 20 185 also work very well.
Our tip: wind adhesive tape around the cut area to stop the rope fraying / untwisting.

What can I use to cut thin, thin-walled copper pipe (e.g. on the compressor of the fridge) without the pipe being (completely) pressed closed?

Generally copper pipes can also be cut using cable shears up to the maximum diameter of the respective tool during dismantling (demolition) work.
However it is not possible to prevent a pipe being squashed flat when cut by pliers.

Why do we offer two different VDE ranges (yellow and red handle versus the double-walled, dipped handle)?

The double red dipped handles originate from times when it was not yet possible to produce two-component handles.
Led by the energy companies, there was great interest in VDE pliers with a very different appearance to the "normal" pliers. Both designs are entirely suitable for work on electrical installations.

What do the first four numbers of the article number stand for?

The first four numbers of the article number (as in the 03 00 180) have the following meaning:

What does “atramentised” mean?

Atramentising is another term for phospating and is part of the rust protection concept.

Atramentising alone generally does not offer sufficient corrosion protection. The phosphate layer is however an excellent primer for a covering layer of varnish. It is completely normal for this layer to become worn down in the area of the cutters.

Why doesn’t Knipex have any left-handed pliers?

Left-handed tools are necessary when it is not possible for left-handers to use a “normal” tool, for example in the case of a breadknife, household scissors or a carpenter’s axe.
But pliers usually have a symmetrical design which means they can be operated without a problem in either your right or left hand.
In a few types of pliers there is a “preferred hand”, e.g. when adjusting the Cobra® water pump pliers or the pliers wrench.

They can also be adjusted easily by left-handers, however; different fingers are used here: whereas right-handers use the thumb on their right hand, left-handers use their index finger on their left hand to release the hinge bolt during adjustment.
While this may look a little different compared to the way a right-hander demonstrates or uses the pliers, left-handers get the hang of it very quickly. :-)