

The purpose of insulators is to insulate the conducting material from the post and the ground. They prevent a flow of electricity between the fence and the soil and ensure that there is always a sufficiently high voltage in the fence conducting material.

## What should I be aware of when choosing electric fence insulators?

The larger the insulator, the better its insulating properties. The use of insulators with dripoff points is recommended. These drip-off points are located between the insulator's eyelets and screw and drain away moisture. This improves the insulating properties of the insulator in wet conditions. (You should therefore never wrap the wire around the drip-off point. This can result is jumping sparks!) If you need to tension the wire, it is better to use a special insulator such as the Spannfix for polywire Item no. 44336)



**Drip-off points** 

Insulators are divided into holding and guiding insulators. Holding insulators go in the direction of the conducting materials, tensioning and holding it. They are mounted to corner posts and tensioning posts.

**Guide insulators** hold the conducting material at the required height and are mounted to stretching posts. To keep the necessary flexibility in the fence, you must ensure to only run the conducting material through the guide insulators. The guide insulators. lators are not intended to tension or grip the material. Wrapping the material around the insulator would remove the required elasticity from the fence. This elasticity is necessary to prevent the conducting material from tearing when, for example, an animal leans against the fence. The type of insulator you should choose depends entirely on your individual circumstances. The type of conducting material to use and the posts dictates which insulators are needed.

The following types are available in our shop:

- ring insulators
- tape insulators
- T-post insulators
- rope/polywire insulators
- corner insulators · insulators with a metric thread
- metal wire insulators
- offset insulators
- · gate handle insulators
- special purpose insulators

Electric fence insulators themselves are made of non-conducting materials. Nowadays, impact-resistant plastic which features UV protection is preferred. However, electric fence insulators can also be made of ceramic or glass. In the development of materials, it could be said that plastic now has so many advantages that it has more or less replaced all other materials. Metal supports are often found inside the plastic. On the one hand, these metal supports reinforce the overall strength and, on the other, they provide the basis for screwing elements into or onto the post. If the insulators were not able to guide the electric fence conducting material, a permanent short-circuit would occur which would mean that the protective function of the electric fence would not be possible.

### Additional functions of electric fence insulators

The electric fence insulator has an important role to play in electric fence installations, i.e. it enables the general basic function of the fence. As well as providing an insulating effect, the role of the electric fence insulator is to guide the conducting material. It is frequently possible to see with the naked eye how well the conducting material is guided. If the electric fence conducting material sags too low or possibly even touches the ground, the right choice of electric fence insulator has clearly not been made. It is not easy to choose the right electric fence insulator. If you are not used to dealing with electric fence insulators, you may wonder why such a wide choice of different types exists. Electric fence insulators can be roughly divided into the following main functions:

- guiding the conducting material changing direction in the corners straightening out the conducting material
- creating gate entrances
  keeping distance

## Types of electric fence insulator

The term **ring insulator** is typically associated with ways of guiding the conducting material. Ring insulators have been used for decades and are available both with metric and self-tapping threads. They can be used for electric fence polywire, rope, metal wire and also for narrow electric fence tape. If you are looking for metal wire insulators, you will find exactly what you're looking for with classic ring insulators. Electric fence wire insulators are made of special plastic which is resistant to UV rays, damp and cold temperatures and, to some extent, is strengthened by a metal core or wooden thread.



If you use broad electric fence tape, you will require an **electric fence tape insulator**. This is available in many variations and designs. A clip insulator is regularly used in this case. This electric fence insulator for broad fencing tape is easy to mount and features a convenient and simple closing mechanism.













Electric fence rope can be naturally guided with commonly used ring insulators. However, over recent years, improvements have also been made so that the thickness of the rope is now also taken into account. This is because rope is often subject to other loads which can be transmitted onto the electric fence insulator. Therefore, electric fence insulators must be robust and of an appropriately high quality.













However, such loads do not just occur with electric fence rope. Electric fence insulators must always be able to resist various forces when the electric fence polywire enters a corner, i.e. when the material changes direction. These forces are guided by special corner insulators and tension insulators. These electric fence insulators are particularly reinforced. It is ultimately only in this way that requirements can also be fulfilled in terms of the forces exerted on the insulators.













Speaking of forces ... If you have ever taken part in a tug-of-war you will know that it is not at all easy to keep a rope in a horizontal position above the ground when just each end of the rope is pulled. It takes many contestants to keep the rope taught. In the case of electric fences, so many "competitors" are not always available. However, over the years, the system for maintaining tension and strain on electric fences has been refined. This is ensured particularly for electric fence tape by corner / tension insulators, cleat and tape tensioners. Thus, it is possible to ensure tension along increasingly shorter distances. This relieves tension and means that the entire fence forms one strong, firm unit.

However, it's not just tension that needs to be ensured: horses and ponies, in particular, tend to nibble the fence material, which means that offset insulators are necessary. These insulators are also available to match the appropriate conducting material. For instance, offset ring insulators exist, along with offset rope and tape insulators. All these types are designed to ensure that large distances can be created between the conducting material and the fastening. This system is also preferred in horse pastures to increase the distance between stallions.













In addition to these properties, it is also possible, with electric fence insulators, to erect electric fence gates. Used in conjunction with a handle, gate handle insulators facilitate access to the pasture. Working together, these two items complement each other perfectly to create a complete electric fence gate system.













The individual examples have shown that electric fence insulators combine many well-known and lesser known possibilities. Applications with electric fences are extremely varied. Without electric fence insulators, an important element of a fence system would be missing. Our electric-fence.co.uk team will be delighted to answer any questions you may have concerning electric fence insulators. So you can quickly find the right insulator to meet your requirements.

When checking out, don't forget to see if you need a drill chuck, makes the installation of insulators so much easier.



How effective would an electric fence be without a gate? Only half as practical, efficient and safe, as after all, the electric fence system should include a suitable access point. As every detail counts in this respect too, it is a good idea to rely on gate handles and sets for electric fences which are made by reputable manufacturers.

## Electric fences offer the highest level of safety

Electric fences have proven successful in protecting horses and cows out in the fields, providing a defence against wild animals or fencing in pets in the garden. However, it is important to ensure that all the components are well matched. You should not forget any aspects and you should also make sure that you use the equipment correctly. After all, we are talking about electricity here. Accessories of all kinds and optimum equipment are an advantage particularly on critical sections of the fence such as the start or end of the fence, or on the fence gate. Gate handles and sets for electric fences are subject to high requirements, meaning that you should not just settle for the next best thing. The gate system and electric fence gate handle ensure easy access to the electric fence and ensure that the gate does not become the weak point in the fence system.



Not only should you ensure that the electric fence posts, conducting material, energisers and insulators are well secured and operate flawlessly, it is also important to make sure that the electric fence gate operates smoothly. On the one hand, the gate provides the easiest and fastest possible access to the animals inside the fencing. And on the other, it's important to ensure that the gate does not create a weak point in the fence system because, for example, it leads to electricity being lost. We recommend electrifying the gate so that the animals do not choose this point to escape through or damage the fencing. This is where gate insulators and gate handles for electric fences are useful. Complete gate handle kits can also be ordered in the online shop.

## What is important where gate handles are concerned?

The aim, on the one hand, is to avoid getting an electric shock and on the other, to avoid wasting time awkwardly wrestling with components. An electric fence gate handle meets both of these criteria. The non-slip device made of insulating plastic is mounted on the gate with hooks or eyelets and maintains a firm hold. A simple tension spring means that it's child's play to use. Electric fence handles exist in a wide range of colours so that you can find the right one to match your fence system, and the standard size is suitable for most popular electric fence gates. If you chose a bright, colourful shade, you will benefit from optimum visibility. The metal parts of the gate handle and gate handle kit are, of course, made from rust-free stainless steel so that they can withstand extreme weather conditions for many years. High-quality gate handles for electric fences are characterised by the fact that they are not just made of tough, UV-resistant plastic and robust metal, but also feature a tension limiter or tension spring, and, thanks to extra-large eyelets, can be combined with a whole range of gates. Certain models include a universal connector for polywire and rope, and can be mounted without any tools. The affordable gate handle kit includes springs, a door handle and door insulators all in one set. One should also not forget about the retractable tape or rope gate systems also available in our shop.





# Our Range of Connectors & Tensioners



On electric fences, it's important to pay attention to every aspect, and to proceed appropriately. Only in this way can a high level of safety be ensured. After all, you are dealing with electricity. With this in mind, you should invest in connectors and tensioners as these components affect the electric fence's functional efficiency.

#### Connectors and tensioners for electric fences: safe, reliable and resilient

The conducting material is an important part of any electric fence. Electricity, which is transmitted by the energiser, flows through the conductors and frightens off any animals that come into contact with them. In conjunction with the mechanical barrier, the electrifiable conducting material makes the electric fence insurmountable. Insulators play an important role here. But what about connecting the conductors together and what should I use for junctions and critical points? This is where connectors and tensioners come in. As with the other fence system components, connectors and tensioners for the electric fence must also













be coordinated with the respective conducting material, and can be used in many ways

### Correct use of fence tensioners and connectors

You should never tie conductors such as electric fence tape or rope together to connect them. Not only would this impede the flow of electricity through the fence system, but it would also represent a safety risk and could damage the conducting material. Anyone wishing to correctly extend, repair or erect an electric fence, or equip it with accessories, cannot avoid the use of connectors or tensioners. Connectors are used for correctly connecting conductors, especially tape and cord. Tensioners are used so













that you can have both hands free when erecting the fence system or performing a repair.

# Connectors and tensioners: high quality and a wide choice all in one

It is, of course, important that the electric fence connectors and tensioners match the conductor as it is only in this way that it can be held in position and enable an uninterrupted flow of electricity. For example, connectors for polywire are suitable for conductors with a diameter of up to 3 or 4 mm. They are made of galvanised metal or particularly sophisticated stainless steel, and are available in a set.

Electric fence connectors for rope are available with diameters of 5 to 6.5 mm. These electric fence connectors can be used as an alternative to connector clips, and are characterised by their durability, robustness and by the fact that they are easy to use. Tape connectors have a different structure to connector clips but are equally high-performing.

### Electric fence tensioners and connectors - an important detail

Rope connectors, polywire connectors and tape connectors in various designs are a small detail that should not be forgotten. On electric fences, the safe electric and mechanical connection of conductors is essential for ensuring flawless operation.

We recommend the use of electric fence connectors made by reputable manufacturers especially on critical points of the fence subject to high stress. Whether on a gate or at the start, end or corner of the fence, the combination of a connector and tensioner for all types of electric fences makes the whole thing more secure.

This is the end of our 6-edition pull-out. Thank you for reading and if you missed any of our previous pull-out guides they will be shortly available for download on our website in the How-to Guide section.