

# ELECTRIC FENCING RANGE 2016



We are producing security and give impulses!

horizont – the pro in electric fencing

## More than 50 patents...

... were developed by horizont in the last 70 years. In the horiSMART AN 160 the patent “intelligent security technology” takes place in order to reduce the risk of animal injuries.

More on page 4



## 70 years!

horizont celebrates 70 years!  
The history of a brand on page 5.

## Website

Visit our new website.  
Optimized for all end devices:  
📄 [horizont.com](http://horizont.com)

## Checklist

What do you need for an electric fence? Find all information on the checklists at page 7 & 8

# Highlights 2016



## Defence against the wolf

Are offering our special wolf defence systems.  
Recommended by:



> p. 139



Dieter Hake  
Managing director

For more than 70 years the company horizon has been related to innovations and quality "made in Germany". With the invention of the first battery power supplied electric fencing energizer in the 50's, the first solar power supported energizer worldwide in the 70's to the current energizers with GPS- and SMS modules, was and still is horizon an innovation driver on the market. In future the development of our products are orientated to the trend "smart farming", in order to offer you solutions which are intelligent and integrable. By now I can promise you, that in future we will strengthen our position as innovation driver.

Dieter Hake

*Dieter Hake*

## A small selection of our highlights

Be aware of the  –symbol in the catalogue, to discover all of the highlights!



### Intelligent

the new ranger AN3000 will protect your animals. It offers GPS–location control, SMS control and a few operation modes:  
> p. 24



### Always well camouflaged

are our new camouflaged energisers. Each energiser has a mask pattern and disappears optically in to nature. Therefore it is protected in an optimum way against theft: > p. 34



### More safety

offers the new patented horse rug Fence Buster™ for winter. The electricity is conducted through the cover when touching the fence: > p. 92



### New connections

are possible with our new tape connectors, made out of one piece for a tool–free assembly: > p. 94



## Electric fences



### horiSMART 2-level technology

horiSMART fences will only permit the maximum impulse energy of 5 Joules (excl. those fences designed for populated areas). With a good fence situation and a fence without load they will always operate on a very low level with enough release of power – the CPN system = constant power niveau. With very high voltages the horiSMART technology operates just in the warning phase, which deters the animals and people without being dangerous or inflicting harm. The fence can detect the difference between a low residual resistance load and a contact load, and adjust the output accordingly. After 60 seconds the fences switches up to maximum output normal operation – and can destroy any vegetation which has grown to touch the fence keeping it clean and running efficiently.

### APN

#### APN – automatic power niveau

Set by the potentiometer or set to 50% by the setup of the energiser for AN50 / 70. APN adjust the output power step by step depending to the fence situation.



### horizontal load sensing circuitry – less strain on the environment

The load sensor automatically adjusts the output to give the appropriate power to the fence line depending on vegetation or leakage. This horizontal patented system ensures that the fence only draws as much current from the battery as strictly necessary to provide the correct output power for the fence conditions. This ensures both the security on the fence and that the battery life is extended as long as possible thereby reducing operating costs.



### Patented turbo effect – considerable increase in performance

The unique feature produces a secondary discharge of power when a higher output is required to meet the fence line under very dry ground condition. The unit detects if a higher discharge is required and automatically triggers the secondary impulse thereby ensuring a much more effective barrier. turbo-effect – a horizontal patent. Now also with horiSMART energizers page 14 and 15.



**GPS security–GPS location control**  
**SMS– SMS control**  
**MENU set to a modi**



### horimax

for fence burdens  $\geq 500$  Ohm the horiSMART energizers N280, N220, N160 and AN160 are working with horimax technology. Because of this, on higher fence burdens a very high energy potential is achievable.



### LED

Earth and fence line LED voltage indicator lights.



### "argutektor"

Battery fences fitted with argutektor, a patented horizon feature, have the ability to automatically sense the load on the fence and indicate if more current is drawn to keep the fence performance.



**Reduced current consumption by power switch**



### Battery indicator light

By pressing a single push button you can check the capacity and operation of the battery being used.



9/12V

These fences can be operated by using either a 9V dry battery or a rechargeable wet 12V battery.



PC

Premium quality plastic, very durable, and high impact resistant and UV stabilized. (Polycarbonat).



### UV stabilized

A UV stabilizer is used to protect the product and prevent it from early degradation due to ultra violet rays. This is why horizon top quality plastic products have longer life expectancy.



The fence has **two output terminals**: strong and extra strong.



**High/low power switch.** You can switch between **two output levels**: strong and extra strong.



**Very solid battery box.**



**Fence voltage indicator light.** Indicates if the voltage falls below 2000V.



**ON/OFF–Switch.**



**6 Volt level control.**



**Pulse rate indicator light.**



**Potentiometer.**



**Fence with control function.**



**High quality plastic, heat resistant and oil constant.**



**Disturbed operation.**



**Alarm functions at change of fence load from  $\geq 1000 \Omega$  to  $< 400 \Omega$ .**



**Warranty** from date of purchase. Water damage and damage by flash lightning excluded as well as damages by abnormal use of subject (for energizers). At tapes, wires and ropes warranty time refers to UV–stability of the product.

## Explanation of power data



**INPUT** Stored energy



**max. OUTPUT** Impulse energy max



**max.** Max. fence voltage (high power terminal)



**500  $\Omega$**  Fence voltage at 500 Ohm (high power terminal)



**max.** Max. fence voltage (low power terminal)



**max. OUTPUT  $\Omega$**  Output energy max. at fence load of .....



**CEE** Max. fence length (CEE)



**max.** Max. fence length with no load



**max.** Max. fence length with light load



**max.** Max. fence length with heavy load



**Current consumption**



**Qty of possible netting connection**



**Earth stakes (length and qty)**



**230V** 230volt operation



**12V** 12volt operation



**9/12V** 9/12volt operation



**12/230V** 12/230volt operation

## Some special characteristics of horizon fencing materials:



With newly developed conductors of **TDmax** excellent conductivity is possible. The conductor is extremely weather resistant and high fight connection. **Up to 180 x times improved conductivity compared to a standard quality (14,4  $\Omega$ /m)!**



### Bridge conductors

Products with bridge conductors do have a permanent current flow even with conductor breakage.



### Conductivity

Products with this sign do have best conductivity and are recommended also for very long fences.



### High breaking strength

The use of very strong monofilaments gives these qualities a higher breaking strain. **Up to 10 x times greater breaking strength compared with standard quality!**



### 3 or 5 years warranty from date of purchase

At tapes, wires and ropes warranty time refers to UV–stability of the product.



### UV Stabilisation

Compared to many products from other suppliers, all horizon qualities use monofilaments with highest UV stabilisation to be able to guarantee longer life expectancy.



### PE (Polyethylene – threads)

UV – indexed Polyethylene threads for long life and highest breaking strength. Polyethylene threads have a smooth surface and are suitable for elastic surfaces of tapes, twines and ropes.



### horizontal insulator backup with thread for wood

- Long and extreme taper thread for easy installation
- Self tapping thread for screwing in easily
- No pre–drilling required
- Sharp thread edges for a secure fit of the insulator
- Insulator support is produced from tempered steel.

## First Aid –find the right energiser



Benno Spilker  
Produktmanager Weidezaun

### Your ideal energizer!

It is not difficult to find the right energizer! You just have to keep in mind some important points. Our range includes an energizer for nearly every task and user. With the help of the following points you will be able to find the most proper energizer in a quick and simple way.


Benno Spilker

## 2) Which power operation do I wish?

**9V** Battery operation

**12V** Battery operation

**230V** Mains operation

 Operation with solar power

We differ our energizers between the types **B (9 V battery fencer)**, **A (12 V battery fencer)**, **N and M (mains fencer)** and **S (solar fencer)**.

Each type offers advantages and disadvantages.

Some fencers combine operation modes: > see p. 9

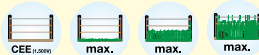
## Which kind of animals am I going to herd?

Each animal has special characteristics. The sensitivity or the hair/coat is important for the correct installation of an electric fence. With the help of the indicated animal icons you can easily see, for which kind of animal we recommend the energizer. :



Have a  
look at the  
icons!

## Which length should the fence have?



The length of the fence is important for the choice of conductive material. The performance of the energizer and the conductivity of conductive material have to suit each other!

Please be aware, that the indicated length indications are related to optimal conditions! I. e. there is no vegetation on the fence.

Partial energy is discharged from the fence into the ground if you have heavy vegetation on the fence, thus affecting performance!

**More information in our FAQs : > see p. 6**



## What else??

Please find here amplified information:

GPS / SMS–technology > p. 14

FAQ Electric fencing > p. 6

Checklist mobile fence > p. 7

Checklist permanent fence > p. 8

Power supply > p. 9

Fence heights > p. 10

Energizer series > p. 11

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**Specials – FAQ**

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**Electric fence energiser**

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## horizont – The electric fence expert

With horizont you have a real expert by your side. horizont has excelled repeatedly with innovative products and solutions for more than 70 years and owns more than 50 patents for increasing animal safety.

## Your advantages as a horizont customer



### That's what »Made in Germany« is all about

Our electric fence equipment and many accessories are developed and produced in Germany. Extremely low failure rates ensure higher availability and reliability in comparison with competitive products. We back this up with much longer guarantees on our equipment.



### Quick service

In the unlikely event of a defect or damage to an energiser (e.g. by a lightning strike, water damage or similar), our technical service is at your disposal at short notice. Many of our dealer partners can repair your energiser on site thanks to the simple modular design or can help you out with a loan unit during the short repair time (usually within 48 hours).



### Reliable products

All horizont electric fence equipment is endurance tested for at least 24 hours before being packed. The first endurance test takes place at horizont and not out in your fields! When you buy a horizont energiser, you buy safety that you can rely on.



### Tested products

horizont electric fence products are subjected to tests by our engineers and under practical condition. The products are only added to the portfolio when they meet the quality demands in the tests.



### More than 50 patents & registered designs

Our engineers show true pioneering spirit. We have developed more than 50 patents and registered designs in the course of our company history. As a result, we give you more safety and time to deal with other things.



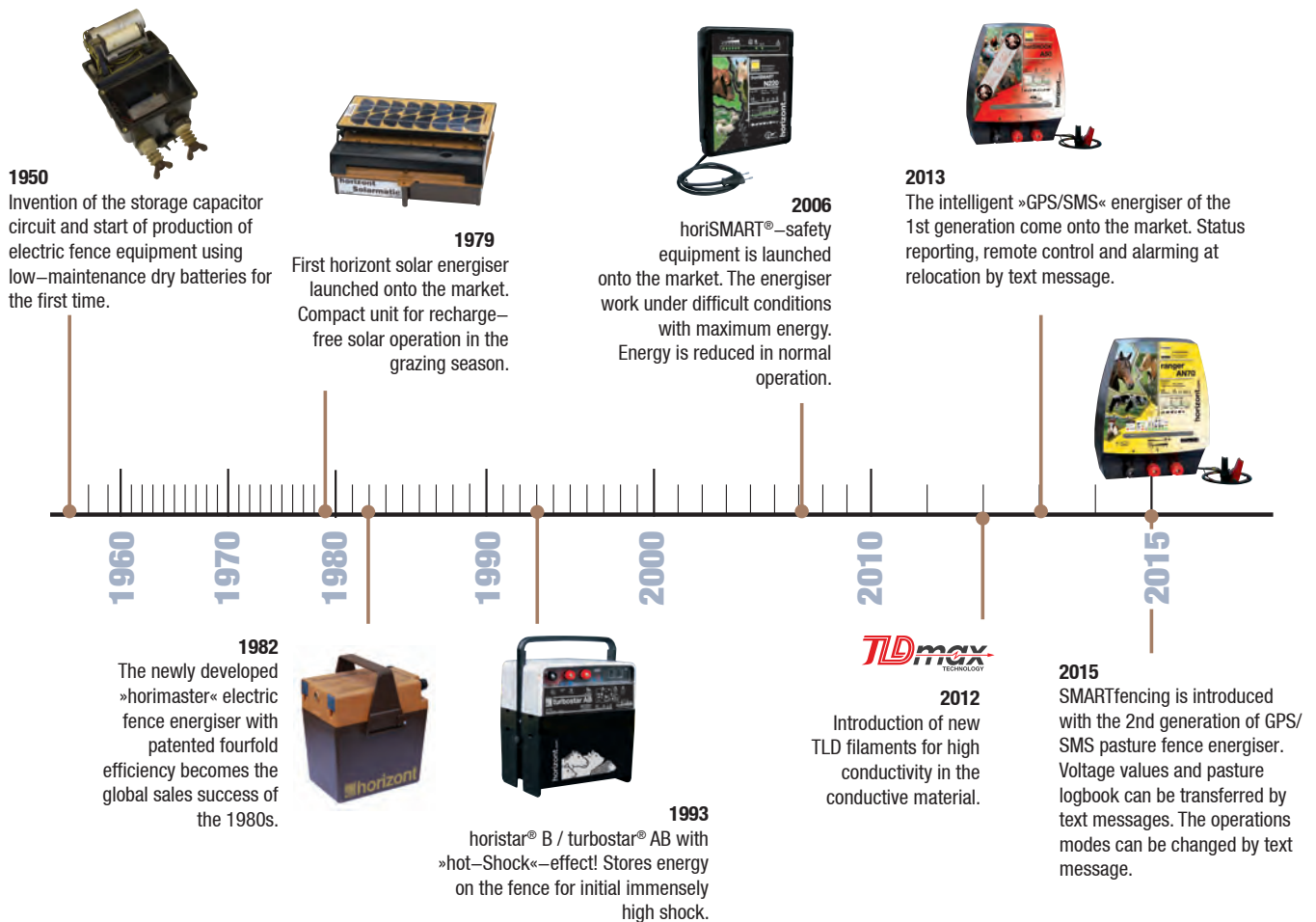
### Consulting service

The horizont team looks forward to your call, e-mail or fax. We are always glad to help you with project planning or problem solutions. Furthermore, we are also always grateful for any feedback about your experience with our products.

**We produce safety and create impulses!**

# We have set trends – for 70 years!

As the inventor of the 9V battery–operated electric fence system we are continuously developing new innovations and products. We have developed more than 50 patents and registered designs during our 70 year company history. Some of the most important of these are shown here.



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## FAQ: Electric fence

Those of you who have had little experience of electric fences will obviously have several questions. At first glance it does not seem easy to choose the right energiser and suitable accessories. We will help you to answer the most important questions.

### What do I basically need to consider?

- The first goal of fence building: To prepare the circuit so that it is closed when touched by an animal!
- Then: To make sure that the current stays in the fence and only comes into action when touched by an animal.

### What does the electric fence energiser do?

- The energiser sends short electric pulses which flow along the fence and remain unused when not touched by animals or dissipated.
- The pulse duration is only 0.1 to 0.3 thousandths of a second and the pulse interval is between 1 and 2 seconds.

### What is earthing?

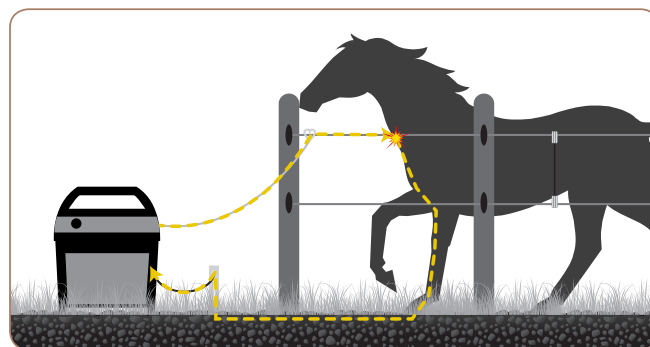
- The earthing is the »counterpart to the freely laid conductor material« in the fence.
- The energy emitted by the energiser is fed back into the energiser through the earth and the ground posts. The earthing turns the circuit into a closed circuit when the energiser is touched.

### What happens when the animal touches the fence?

- The animal closes the circuit! The pulse sent by the electric fence energiser flows through the conductive material, the animal's body, the ground and the earth posts back into the electric fence energiser. Similar to a light switch, the animal or vegetation closes the circuit and the energy flows.
- The animal learns to accept the fence as a barrier and will not try to break through it.

### What have Joules & Volts got to do with it?

- Energy transmitted into the fence is given in Joules. The higher the value, the stronger the electric shock. Joules hurt!
- The voltage of the fence is measured in Volts. The voltage is needed to bridge the insulating skin of the animal. Voltage is the carrier for what causes the shock!

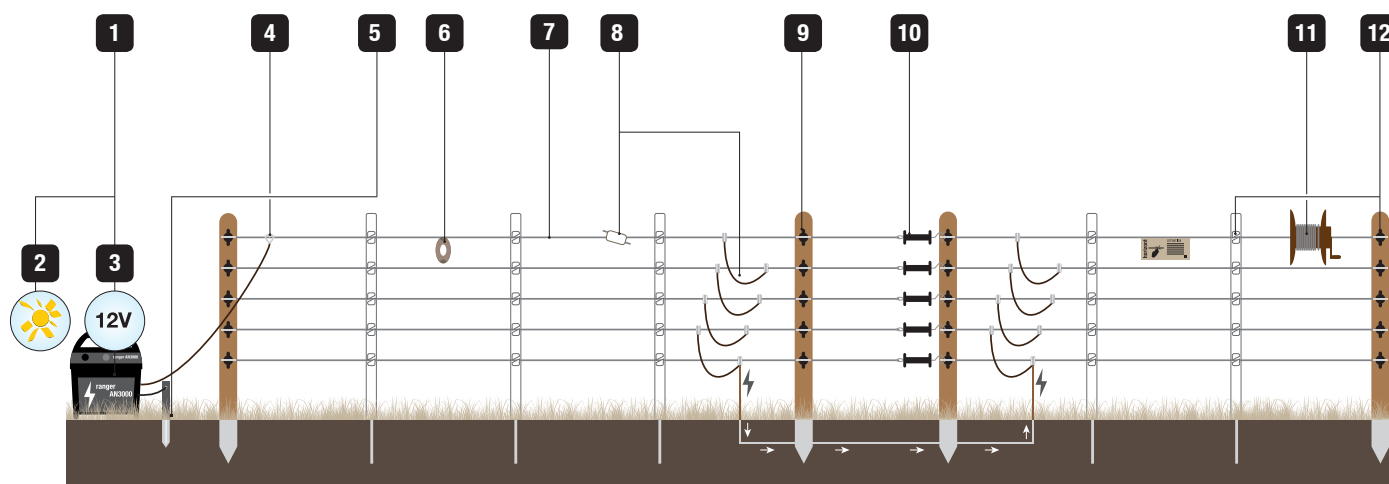


### Why pay attention to good conductive material?

- The conductive material is the actual fence, i.e. tapes, ropes or wires.
- The conductive material transports the electricity and forms the barrier for the animals. The better the material, the higher the current that flows through the fence. Saving on the conductive material is to save on the wrong thing.
- In the worst case, poor material can cause such great energy loss that no current reaches the end of the fence.
- Note: Never knot your conductive material! Too much energy will be lost. Always use suitable connectors to guarantee the current flow.

### Is long grass at the fence a bad thing?

- Yes because the grass or other vegetation draws energy from the fence and the fence therefore loses power.
- The fence lengths are reduced as follows in case of vegetation:  
with medium vegetation:  
to approx. 50% of the specified fence length\*  
with dense vegetation:  
to approx. 20 % of the specified fence length\*  
\*Data for single and multi-wire fences.



### What equipment do I need for a portable fence?

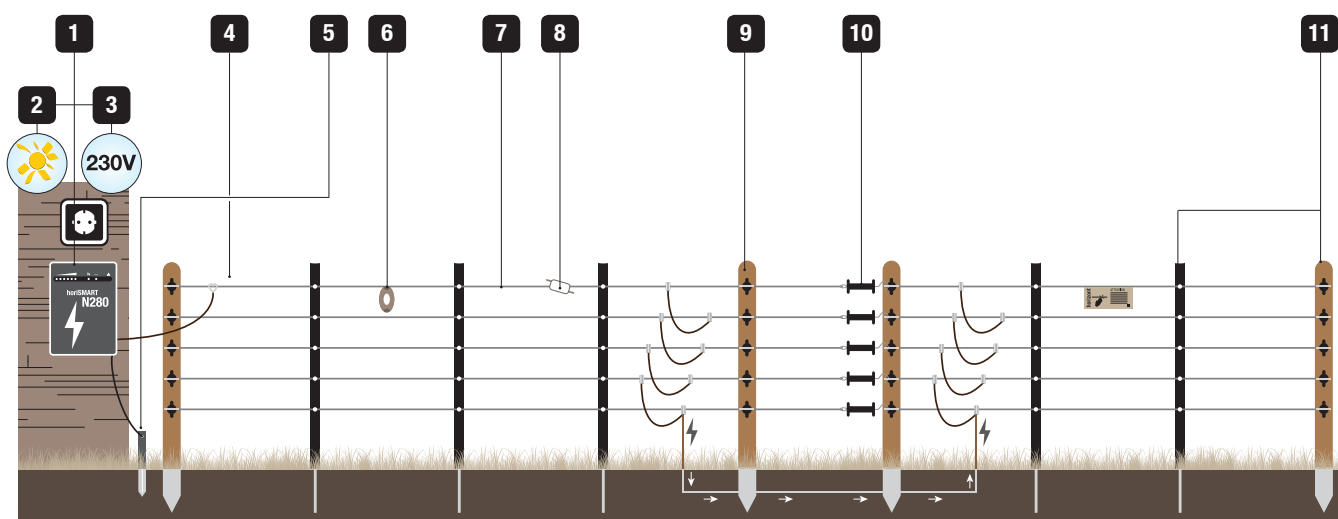
✓	What?	Page	Why?
<input type="checkbox"/>	<b>1</b> Electric fence energiser	11–44	The energiser transmits impulses to the fence. The impulses provide the shock in the electric fence.
<input type="checkbox"/>	<b>2</b> Solar solution	45–53	Use the energy of the sun for 9V battery energiser and 12 Volt rechargeable battery energisers. Save battery costs and tiresome recharging of the battery.
<input type="checkbox"/>	<b>3</b> Energy	65–72	Have you thought about batteries, rechargeable batteries, 230V power pack and battery charger?
<input type="checkbox"/>	<b>4</b> Connection material lightning protection, switch	58–64	Makes the electrical connection from the energiser to the fence. Lightning protection systems are a must for mains units.
<input type="checkbox"/>	<b>5</b> Earthing and accessories	61–64	The energy flows from the ground through the earth post and the connecting cable back into the electric fence energiser.
<input type="checkbox"/>	<b>6</b> Testers accessories, warning signs	54–57	Testers are necessary for informative fence inspection – they make it easier to check the fence function.
<input type="checkbox"/>	<b>7</b> Conductive material tapes, ropes, wires	73	Conducts the electrical impulse in the fence. The conductor is uninsulated and laid open so that it can make a good contact with the animal.
<input type="checkbox"/>	<b>8</b> Connecting and tightening	94–98	The conductive material can be connected firmly and electrically conductive with connectors. The right tighteners ensure taut conductors to avoid injuries to the animals.
<input type="checkbox"/>	<b>9</b> Insulators	91–118	Hold the conductive material well insulated in position. The right insulator should suit the conductive material.
<input type="checkbox"/>	<b>10</b> Gate handles and sets	119–126	Have you thought about access to the fields? A gate is normally used several times a day and should be easy to use.
<input type="checkbox"/>	<b>11</b> Reels	127–129	A portable fence or portable sections can be set up and dismantled quickly and easily with a reel.
<input type="checkbox"/>	<b>12</b> Posts	130–135	Plastic or metal posts with insulators hold and guide the conductive material along the field and to the ground. We recommend strong wooden posts for gates and corners.

### This is how you build the fence properly:

Our electric fence expert explains to you again step by step in the video the best way to find the perfect energiser! ☑



Here you go to the check list for the permanent fence!



### What equipment do I need for a long-lasting, reliable permanent fence?

✓	What?	Page	Why?
<input type="checkbox"/>	<b>1</b> Electric fence energiser	11–44	The energiser transmits impulses to the fence. The impulses provide the deterrent in the electric fence.
<input type="checkbox"/>	<b>2</b> Solar solution	45–53	Use the energy of the sun for 9V battery energiser and 12 Volt rechargeable battery units. Save battery costs and tiresome recharging of the battery.
<input type="checkbox"/>	<b>3</b> Energy	65–72	Have you thought about batteries, rechargeable batteries, 230V power pack and battery charger?
<input type="checkbox"/>	<b>4</b> Connection material lightning protection, switch	58–64	Makes the electrical connection from the energiser to the fence. Lightning protection systems are a must for power supply units.
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<input type="checkbox"/>	<b>7</b> Conductive material bands, wires	73–93	Conducts the electrical impulse in the fence. The conductor is uninsulated and laid open so that it can make a good contact with the animal.
<input type="checkbox"/>	<b>8</b> Connecting and tightening	94–98	The conductive material can be connected firmly and electrically conductive with connectors. The right tighteners ensure taut conductors to avoid injuries to the animals.
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<input type="checkbox"/>	<b>11</b> Posts	147	Plastic or metal posts with insulators hold and guide the conductor material along the field and to the ground. We recommend strong wooden posts for gates and corners.

### This is how to build the fence:

Our electric fence expert explains to you again energiser!





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## The right energy supply

The type of energy supply is just as important as the length of the fence system for the choice of the electric fence energiser. The mobility of the energiser and the maintenance effort are determined by the type of energy supply (9, 12 or 230 Volt).



9V



### 9V battery unit

Prefix „B“

#### + Optimal:

- Light and mobile
- Flexible in use
- Solar operation possible
- 12V battery operation possible

#### ! To be noted:

- Possibly insufficient power for long-haired animals and long fences
- Regular purchase of dry batteries necessary

#### Calculate the battery life:

- The capacity of the used 9 Volt battery divided by the current consumption of the electric fence energiser of e.g. 22 mA
- e.g.  $120\text{Ah} : 0.022\text{A} = 400$  hrs.
- The 9 Volt battery is discharged 100%.
- see pg. 66

12V



### 12V battery unit

Prefix „A“ or as dual or combi-units  
prefix „AN“

#### + Optimal:

- Strong performance, therefore suitable for long-haired animals, dense vegetation and long fences
- Battery is rechargeable
- Solar operation possible

#### ! To be noted:

- Consider charging time
- Additional theft protection recommended (e.g. GPS/SMS)

#### Calculate the rechargeable battery life:

- The useful life of a 12 V battery until the next recharge is calculated by dividing the capacity of the used battery by the current consumption of the energiser
- e.g.  $100\text{Ah} : 0.5\text{A} = 200$  hrs. x 0.6
- Caution: In practice, the battery should be recharged when it reaches 60% capacity in order to avoid damage to the battery by complete discharging.
- see pg. 68

230V



### 230V power supply unit

Prefix „N or M“

#### + Optimal:

- Strong performance, therefore suitable for long-haired animals, dense vegetation and long fences
- Low current consumption
- Secure installation on the building
- Theft protection

#### ! To be noted:

- Conditionally suitable for portable pastures
- Lightning protection system required



### Solar energiser

Prefix „S“

#### + Optimal:

- Environmentally friendly
- Light and handy
- Flexible in use
- Long operating times due to energy solar module

#### ! To be noted:

- Additional battery charge cycles may be necessary under overcast weather conditions.

## How to prolong the life of batteries or rechargeable batteries:



A current saving circuit can prolong the life of the battery or rechargeable battery by more than 4 times!



Use a solar panel during the day:  
The electric fence energiser is operated by solar energy during the day and by the energy from a 9 V battery or 12 V rechargeable battery at night!



### How far apart should the posts be?

The following distances have been proven for optimum fastening of the conductive material between the posts:

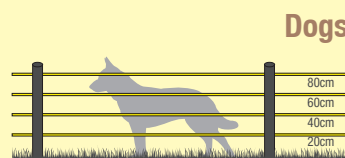
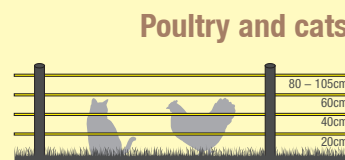
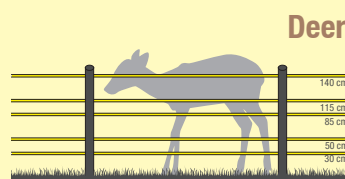
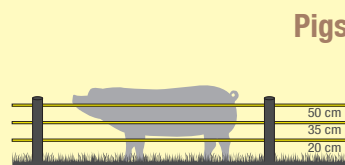
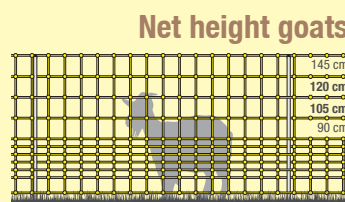
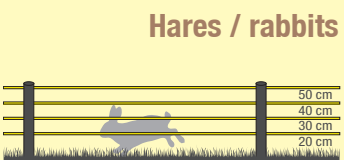
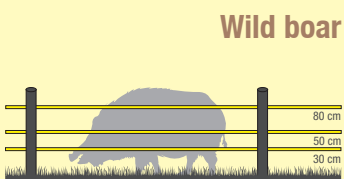
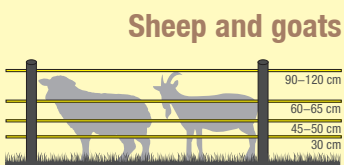
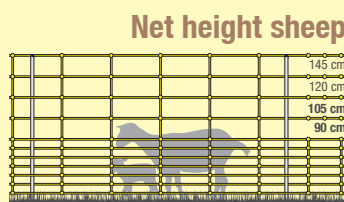
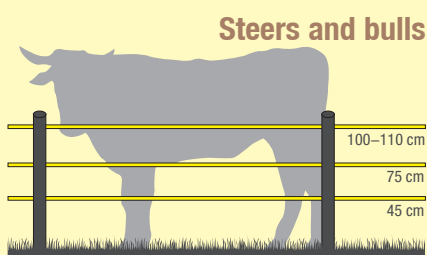
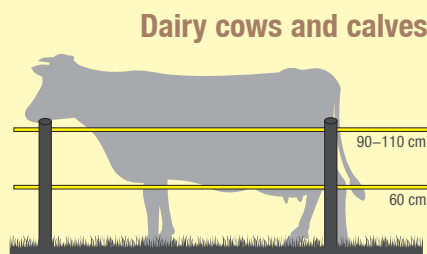
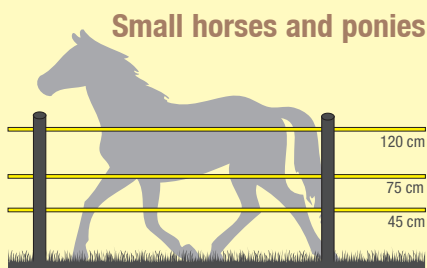
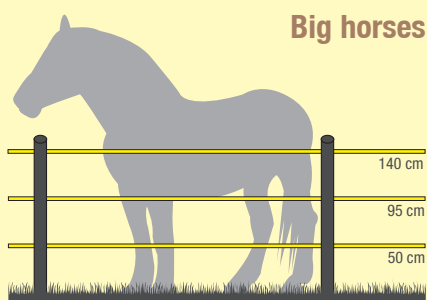
- **Ropes and twines:**  
6 m to 8 m (depending on the net weight)
- **Tapes:**  
3 m (for tape 40 mm), 5 m (for tape 20 mm) ,  
6 m to 8 m (for tape 10 mm)
- **Wires:**  
4 m (for diameter 6–8 mm), 6 m (for diameter 5–6 mm)
- **Terrain:**  
Please observe local conditions! If the terrain is very uneven, more posts are necessary to run the conductive material parallel to the ground.

### What else do I need to consider?

- **IMPORTANT:**  
Never operate fence systems and nets without an electric fence energiser!
- **Connectors:**  
Never knot your conductive material – always use suitable connectors to guarantee the electricity flow.
- **Warning signs:**  
For safety reasons, you are obliged to position these well visibly and in sufficient numbers (pg. 57) along your electric fence (printed both sides).
- **Circuit:**  
The fence must not be set up as a closed circuit – the circuit is closed by animal contact
- **Daily inspection:**  
Our »SMARTfencing« GPS energiser of the 2nd generation makes inspection of the electric fence much easier.
- **Conductivity:**  
ensure high impulse energy on conductive material material with high conductivity and good earthing.

### How high must the fence be?

The specified wire heights are recommended values for your fence. Of course, the size of the animal and the respectively valid insurance regulations are decisive for the height of the wire. You should also consider the »jumping ability« of your animals.



# Electric energiser

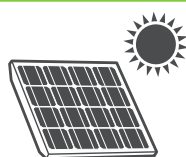
1. Find the right product series for every job.  
You can find the right conductive materials, insulators and other accessories from a product series to suit your energiser by the colour coding and name.
2. The areas of application are quickly recognisable from the animal symbols printed on the energiser.

## Versatility energiser

<b>horiSMART®</b>	Intelligent premium energiser for the professional use	> pg. 15
<b>turbostar®</b>	Unique due to the turbo effect	> pg. 15
<b>ranger®</b>	Powerful for medium to long fences	> pg. 19
<b>farmer®</b>	Ideal for short to medium fences	> pg. 25
<b>hotSHOCK®</b>	Wild animal defence, sheep minding & poultry	> pg. 31
<b>trapper®</b>	Handy combienergiser	> pg. 35

## special energiser



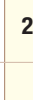








<b>GPS SMS MENU</b> SECURITY CONTROL FUNCTION	The new generation of electric fences	> pg. 14
<b>Camo</b>	Blends in with the natural environment	> pg. 34
<b>Equi STOP</b>	Optimal for horse keeping	> pg. 38
<b>hobbygard®</b>	Electric fence for house and garden	> pg. 40
<b>Happy</b>	Trendy beginners energiser the non professional	> pg. 42







Discover our versatile solar electric fence energiser from page 46

**AB = rechargeable battery/battery energiser**

**AN = rechargeable battery/solar**

horiSMART AN160 10749	ranger AN3000 10854	ranger AN70 10857	ranger AN50 10858	hotSHOCK A50 10613	hotSHOCK A15 10638	farmer AN1000 10855	farmer AN25 10897	farmer AN15 10896	trapper AN24 10865	trapper AN12 10866
										
17	24	21	21	31	31	28	27	27	36	36
•										
•										
•	•	•	•	•	•	•	•	•	•	•
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						•				
180	40	130	100	80	30	40	50	30	18	12
45	15	40	20	30	8	10	15	8	12	8
21	4,5	20	5	15	3,5	3,5	4,5	3,5	5	3,5
14	1,7	10	2	8	1,2	1,2	1,7	1,2	1,5	1,2
17	10	14	12	14	6	5	10	6	6	4

farmer AS70 14475UK	trapper AS70 14983UK	trapper AS35 14982UK	trapper AS20 14981UK
			
30	37	37	37
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●
●	●	●	●
18	18	8,5	3,7
16	16	5,0	2,8
4,2	4,2	3,6	0,9
1,6	1,6	0,9	0,3
—	—	—	—



## GPS SECURITY

### Safety

- Switching on/off
- Location monitoring
- The safety radius (Geofence) around the energiser is freely selectable
- You receive an alarm message when the energiser leaves the safety radius (Geofence)

## SMS CONTROL

### Remote control

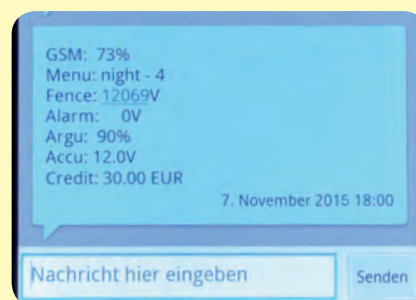
- Switching on/off
- Transfer of the battery voltage and backup battery from the GPS/SMS module

## MENU FUNCTION

### Remote control of the electric fence energiser

- Switching on/off
- Menu control
- Power control
- Status report of the battery charge by a solar panel (only ranger AN3000)
- Automatic alarm message on dropping below the pre-set voltage thresholds
- GSM reception quality
- Transfer of the remaining credit on the SIM card
- Transfer of the fence insulation display – »argutektor«
- Transfer of the battery voltage and backup battery from the GPS/SMS module
- Transfer of the fence voltage at the output of the electric fence energiser

**Pasture logbook** – if the fence voltage does not drop below a pre-set value within 24 hours, a message with the lowest fence voltage value is sent. This documents regular inspection of your fence.



Example text message

## GPS SECURITY SMS CONTROL MENU FUNCTION

## GPS SECURITY SMS CONTROL

### Battery/Mains ranger AN3000 GPS\*

Part no. EAN  
**10854GPS** 

For further info about the  
ranger® AN 3000 see pg. 24




### Battery/Mains ranger AN70 GPS\*

Part no. EAN  
**10857GPS** 

For further info about the  
ranger® AN 70 see pg. 21



### Battery hotSHOCK A50 GPS\*

Part no. EAN  
**10613GPS** 

For further info about the  
hotSHOCK® A50  
see pg. 33



and the Internet

\*The GPS variants have 50mA higher current consumption than the standard energiser



### Professional energiser:

The horiSMART® energiser have a special safety circuit which increases the power with a »turbo« if required. For high performance.

Made in  
Germany

**horiSMART®**  
**turbostar®**



### For high performances

Energy outputs of more than 5 Joules demand a DELAY safety circuit. horiSMART® energiser are available up to maximum of 14 Joules output energy and are therefore ideally suitable for long fences.

### DELAY – safety circuit

If prolonged, short-circuit-like disturbances (vegetation, other dissipations) occur on the fence, the horiSMART® energiser increase the transmitted power after a delay of less than a minute. A further »turbo« impulse is added to the basic impulse. Maximum energy increases automatically.


### For dry ground

The horiSMART® energisers are equipped with the horimax technology in normal operation (without turbo). This enables comparatively high performances, especially under dry summer ground conditions.

### Dual energiser

The horiSMART® AN energisers can be operated simultaneously on the 230 Volt mains together with a 12 Volt battery. The energiser operates with priority on the 230 Volt mains and switches over to the 12 Volt backup supply automatically if the 230 Volt supply fails. The 12 Volt battery is trickle charged by the mains connection.

### Turbo B

Has a current saving circuit. A fence status check is possible on the »argutektor« . The turbo impulse is added automatically as required.

### Chapter

### Page

**horiSMART® series I Technology**

**16**



**230V**

**17**

**horiSMART® series I Mains energiser**

**230V**

**9V**

**17**

**horiSMART® series I Dual energiser**

**9/12V**

**18**

**turbostar® series I Battery energiser**

**turbostar® series I Solar accessories**

**18**



## horiSMART® (turbo with horimax)

### Clever security energiser from horizon

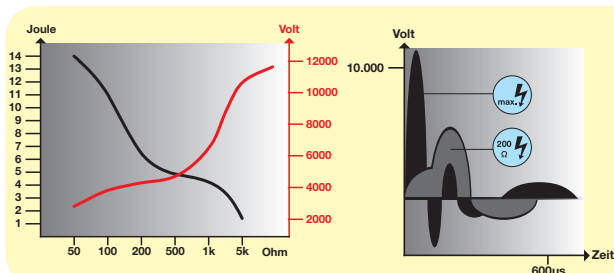
horizon has updated the well-tried and reliable security energisers horiSMART with enlarged power. Also the new horiSMART energisers follow the norms for strong energisers. As soon as the new horiSMART energisers recognize lengthy disturbance at the fence (vegetation growth, heavy loads), maximum energy is transferred to the fence, after a security time of 55 seconds.

As soon as the energisers recognize a fence load change back to 500 Ohms, power is restricted down to 5 Joules or less. At a sudden change of fence load (and minimum 6 impulse long lasting change) from 1 000 Ohm to 400 Ohm or lower as long as the fence load exists and after a maximum 10 minutes an acoustical and optical alarm comes up and the impulse interval prolongs to one impulse per 3 seconds.

With this horiSMART energisers work at the hardest conditions safely and reliably.



**Please pay attention also to our horiSMART alarm energisers (see page 46 and 47)!**



- Highest possible security for humans and animals, as maximum power is given only when it's needed.
- High guarding safety as power is enough also for long fences and all kind of ground conditions
- Minimum danger to humans and animals as power only rises up for duration of disturbance (vegetation, heavy loads)
- Output voltage at high fence loads is extremely high to be able to operate long fences guarding safely

## horiSMART® 230 Volt und 12 Volt (turbo with horimax)

Suitable for stubborn and unsensitive animals

### horiSMART® N280

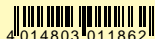
- Mains energiser, 25J Input, 14J max. Output
- For fences up to 85km with no load and 25 km with heavy load



Part no.

EAN

10748UK (with UK plug)



### horiSMART® N220

- Mains energiser 20J Input, 11J max. Output
- For fences up to 65km with no load and 20km with heavy load



Part no.

EAN

10747UK (with UK plug)



### horiSMART® N160

- Mains energiser, 12J Input, 8J max. Output
- For fences up to 45km with no load and 14km with heavy load



Part no.

EAN

10746UK (with UK plug)



## Dual energiser horiSMART® AN160

- Mains- / battery operated, 12J Input, 8J max. Output
- For fences up to 45km with no load and 14km with heavy load
- Battery control indication
- Combination equipment (12 / 230V)
- Included in delivery:
  - Connection cable for 12V battery



Part no.

EAN

10749UK (with UK plug)



#### Advantage dual-use:

Energiser can be operated with 230 Volt mains power and in case of a power cut will be operated by an additional connected 12 Volt battery without interruption.

Recommended solar panel

**1–2 x 50 Watt**  
Part no. 14873 (see p. 48)

Recommended battery  
≥ approx. operating time

**230 Ah**  
Part no. 25012B (see p. 68)  
up to 153 – 287 hours  
(= approx. 6.4 – 12 days)\*

Big battery box

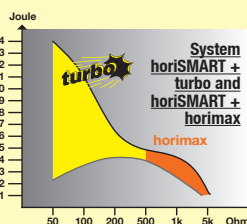
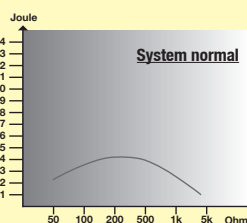
Part no. 21264 (see p. 68)



Connection cable for 12V battery  
Four level accumulator control

### Hint!

Special deep discharge switch off provides more information about deep discharge protection. Your battery will fully discharge but does not switch off the energiser too early. Please read also notice at p. 67

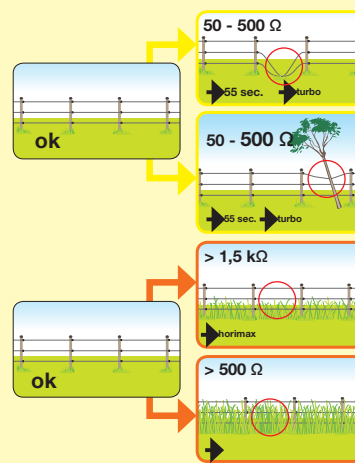


For fence burdens under 500 Ohm get a second impulse to the basic impulse.

When fence burden removed energy gets higher, in accordance with Norm Specifications (EN 60335–2–76).

### horimax:

For fence burdens > = 500 Ohm the horiSMART energisers N280, N220, N160 and AN 160 are working with horimax–technology. Through this enormously high energy potential is available over a wide fence burden area.



	230V	12V	turbo	horimax	INPUT	max. OUTPUT	max. V	500 Ω	CEE	max.	max.	max.	max.	max.	max.	max.	max.
--	------	-----	-------	---------	-------	-------------	--------	-------	-----	------	------	------	------	------	------	------	------

10748UK	horiSMART® N280	✓	–	✓	✓	25J	14J	12 000V	4600V	35W	320km	85km	40km	25km	30x50m	5x1.5m	–
10747UK	horiSMART® N220	✓	–	✓	✓	20J	11J	12 000V	4600V	26W	250km	65km	30km	20km	25x50m	4x1.5m	–
10746UK	horiSMART® N160	✓	–	✓	✓	12J	8J	12 000V	4400V	20W	180km	45km	21km	14km	17x50m	3x1.5m	–
10749UK	horiSMART® AN160	✓	✓	✓	✓	12J	8J	12 000V	4400V	500–1200mA	180km	45km	21km	14km	17x50m	3x1.5m	50W

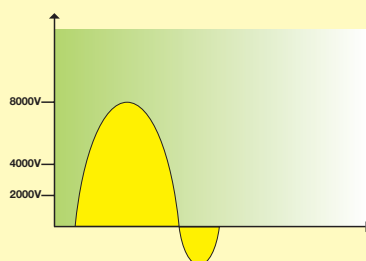
\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

## turbostar® B

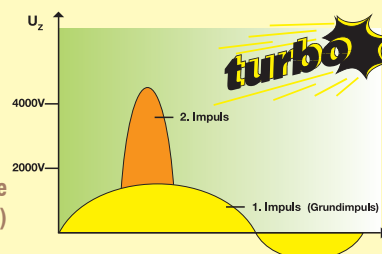
### Unique turbo effect, enormous increase in effective electric fencing

Due to the unique turbo effect it will always give a second impulse when the fence is badly insulated or in heavily weeded situations. Even on dry ground the turbo effect offers significantly higher performance.



Normal impulse  
(well insulated fence)

turbostar® double impulse  
(fence with heavy load)



Who ever uses a turbostar energiser B once will never use any other energiser! Due to its double impulse and also its load sensing circuitry this energiser is the optimal choice for dry ground, vegetation growth and long fences. Very often this energiser is used for wild predator deterring or for sheep keeping. Even at 500 Ohm resistance turbostar B reaches more than 4 000 Volt, absolutely top for a 9 Volt dry battery energiser.

## turbostar® B

### The world champion in energisers!

- Dry battery energiser, 0.4J Input, 0.27J max. Output
- For fences up to 6km with no load and 1.5km with heavy load
- Suitable also for unsensitive animals like sheep and wild boar
- turbostar B controls fence situation and adapts itself to fence situation
- Included in delivery:
  - Fence and earth connection cable with strengthened plastic cover
  - Earth stake with mounting rod part no. 88178



Part no.

**10285**

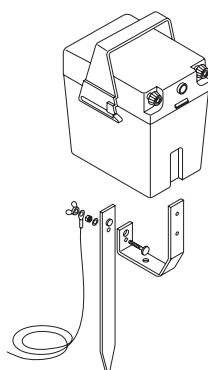
EAN



ON/OFF

PC

UV



This energiser operates with

#### horizont load sensing circuitry:

= less strain on environment and reduced operation costs

= By battery working, the recharging isn't necessary so often, therefore perfect for solar business

- Useable with all dry batteries in small and big housing (see page 66)
- Can also be operated with solar kit (see page 47)
- Useable also with 12 Volt batteries (spare 12 Volt connection cable available, part no. 90501C)



Solarkit 2 Watt  
Part no. 15264F  
see p. 47



10285 turbostar® B	12V	✓	✓	✓	✓	✓	✓	0.4J	0.27J	9000V	4400V	10-35mA	10km	6km	4km	15km	3	1	2W
	9V											10-44mA							

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



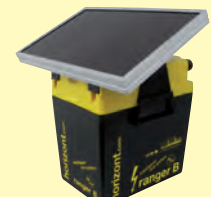
### Allrounder:

The ranger® energiser are especially designed for dry ground conditions. The AN energiser reach very high output voltages which offer high minding security.

Made in  
Germany

**ranger®**

i



### For dry ground

The ranger® series is ideally suitable for dry ground. This property supports the minding performance especially in very dry summer periods.

### Effective & gentle

Due to the wide impulse shape, the energy unfolds effectively and gently in the fence system!

### Intelligent »eco-system«

The ranger® 9 and 12 Volt energiser > pg. 21 are intelligent electric energiser with very high performances. The intelligent »eco-system« and the horizon current saving circuit automatically adapt the output power to the fence condition.

### Dual energiser

The ranger AN energiser can be operated simultaneously on the 230 Volt mains together with a 12 Volt battery. The energiser operates with priority on the 230 Volt mains and switches over to the 12 Volt backup supply automatically if the 230 Volt supply fails. The 12 Volt battery is charged on trickle charge by the optional mains connection.

### Situationally adjustable

Due to the 6 modes of the ranger® AN energiser, the energiser functions can be adapted ideally to the prevailing fence conditions.

### Fence status display

Argutektor – indicates the fence status and the fence insulation. The dissipation from the fence is indicated by this function. The efficiency of the actual current saving of the current saving circuit can be derived.

### Chapter

### Page

ranger® series I Technology

20



230V

ranger® series I Mains energiser

20

230V

12V

ranger® series I Dual energiser

21, 24



9/12V

ranger® series I Battery energiser

22

ranger® series I Solar accessories 22, 24



# Electric fence energisers

## ranger® series | technology | power supply units

Made in Germany

Approved and registered up to international regulations



UV

UV-protected

max.

Maximum fence voltage

Power- and battery consumption

Power- and battery consumption

Fully insulated housing

PC

Very solid PC-housing

INPUT

Stored energy

Shower-proof

Disturbed function

Control function

LED

LED display – 1 000 – 6 000 Volt



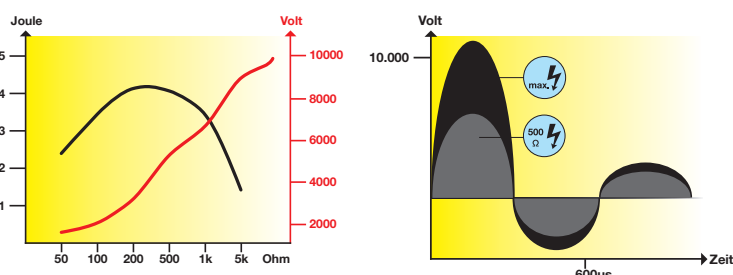
On- and Off and Menu switch (at 12 Volt energiser AN50 / AN70)

### Hint!

Fence control is easily seen from further distance as all indications are shown by the energiser optically.

## All-weather energiser – suitable also for dry ground

ranger energisers always have 3 terminals. Besides a terminal for earth connection, one terminal for normal fences and one additional for a small additional fence or a paddock. Power at the second fence terminal is always limited to non dangerous 0.5 Joules or less. Especially for fences near to buildings this means high security for playing children.



- Strong powered all-weather energiser for various use and for dry ground
- Wide impulse form allows energy to develop its power effectively into fence system
- At high resistance values i.e. long haired animals and dry ground this wide form of impulse is most suitable

## Suitable for all kind of animals

### ranger® N80

- Mains operated energiser, 6J Input, 4.2J max. Output
- For fences up to 40km with no load and 4km with heavy load



Part no.

EAN

10742UK (with UK plug)



### ranger® N40

- Mains operated energiser, 3.5J Input, 2.4J max. Output
- For fences up to 20km with no load and 2km with heavy load



Part no.

EAN

10608UK (with UK plug)



	230V	12V	INPUT	max. OUTPUT	max.	500 Ω	max.	max.	max.	max.	max.	max.	max.	max.	max.	max.
--	------	-----	-------	-------------	------	-------	------	------	------	------	------	------	------	------	------	------

10742UK ranger® N80	✓	–	–	6J	4.2J	10 500V	5 600V	10 000V	7W	100km	40km	10km	4km	16x50m	4x1.5m	–
10608UK ranger® N40	✓	–	–	3.5J	2.4J	11 800V	5 400V	9 000V	5W	60km	20km	5km	2km	12x50m	2x1.5m	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

### 6 MODI:

1. NORMAL: Normal impulse sequence
2. SMART: Normal impulse sequence, output energy is set to 60% of the max. energy. Automatic regulation by the energiser with load changing at the fence, APN\*
3. DAY MODE: Normal impulse sequence at day, slow impulse sequence at night, APN\*
4. NIGHT MODE: Normal impulse sequence at night, slow impulse sequence at day, APN\*
5. SLOW MODE: Slow impulse sequence at day and night, APN\*
6. ONLY NIGHT MODE: Normal impulse sequence at night, no impulse at day, APN\*

\* APN: only with SMS control (see p. 14)

- Clear information display – easy to control from the distance
- Fence tension display and Argutektor display with 6 LED's
- Battery control display – 3 step display for detailed information
- Energy saving function – automatic regulation
- Earthing control
- Delivery contains:
  - Fence and earth connection cable with strengthened plastic cover

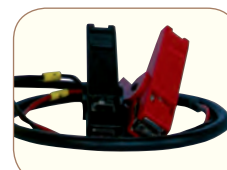
APN = Output energy selectable by SMS (100% – 60%)  
– automatic regulation by the energiser with load changing at the fence

## Advantage: Dual energiser

The new dual fencers AN50 and AN70 are 12 Volt fencers. The connection for the 12 Volt battery is located on the inside of the fencer, so that a 12 Volt battery can be connected. On the reverse of the fencer there is an additional connection plug for a mains adapter. (Available as spare part with part no. 47PSU0010UK). With this mains adapter the fencer can be operated with 230 Volt. With the connection of mains adapter 47PSU0010UK and a 12V battery the combi fencers can also operated in stand-by mode. This means that as soon as 230 Volt mains stops, the fencer automatically is operated with 12 Volt.



230 Volt mains adapter  
47PSU0008UK



12 Volt battery connection

This energiser operated

### horizont load sensing circuitry:

- = less strain on environment and reduced operation costs
- = by battery working, recharging isn't necessary so often, therefore perfect for solar



Now with:  
load sensing circuitry



Also available: (10857GPSD see p. 12)

**GPS SMS MENU**  
SECURITY CONTROL FUNCTION



Now with:  
load sensing circuitry



## ranger® AN70

- Battery – / Mains energiser, 6.5J Input, 4.8J Output
- For fences up to 40km with no load and 10km with heavy load



Part no.

EAN

10857



### ranger® AN70

Recommended solar panel

**1 x 50 Watt**  
Part no. 14873 (see p. 48)

Recommended battery

≥ approx. operating time

**100 Ah**  
Part no. 14126 (see p. 68)  
up to 198 – 1052 hours  
(= approx. 8 – 43 days)\*

Recommended transport box

Part no. 14129 (see p. 72)

## ranger® AN50

- Battery – / mains energiser, 4.5J Input, 3.0J Output
- For fences up to 20km with no load and 2km with heavy load



Part no.

EAN

10858



### ranger® AN50

Recommended solar panel

**1 x 20 Watt**  
Part no. 140641 (see p. 49)

Recommended battery

≥ approx. operating time

**100 Ah**  
Part no. 14126 (see p. 68)  
up to 400 – 952 hours  
(= approx. 16 – 39 days)\*

Recommended transport box

Part no. 14129 (see p. 72)

230V

12V

INPUT

max. OUTPUT

max.

500 Ω

max. V

max.

max.

max.

max.

max.

max.

max.

max.

max.

max.

max.

max.

max.

10857 ranger® AN70

✓

✓

6.5J

4.8J

15 000V

6 000V

14 000V

95–505mA

130km

40km

20km

10km

14x50m

5x1m

50W

10858 ranger® AN50

✓

✓

4.5J

3.0J

14 000V

5 200V

13 000V

100–400mA

100km

20km

5km

2km

12x50m

3x1m

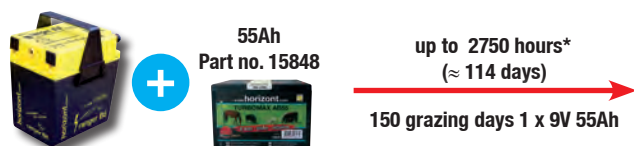
20W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



## Maximum pulse energy and electricity consumption



- Electric fencing ok
- Low power consumption



- Electric fencing ok
- disturbance on the fence  
⇒ Remove disturbance!



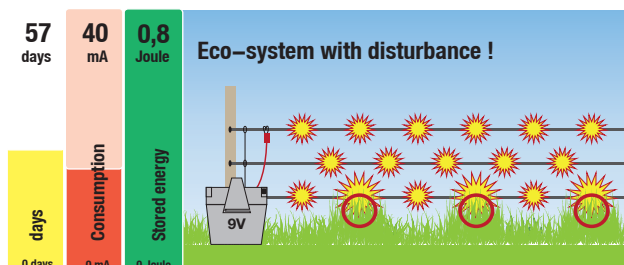
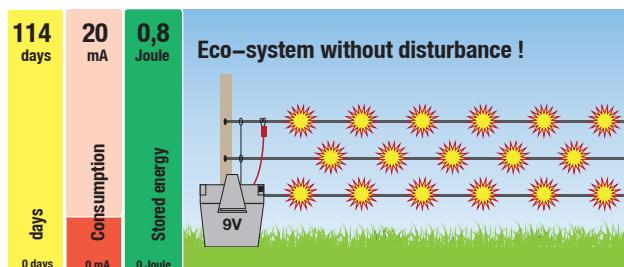
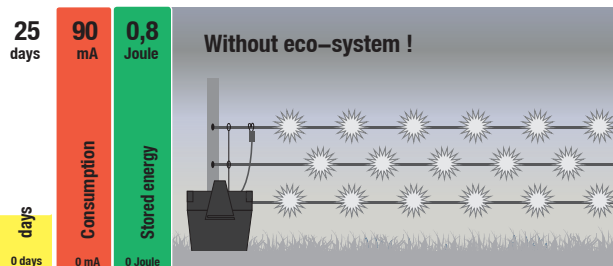
Solarkit 2 Watt  
Part no. 15264F  
see p. 47



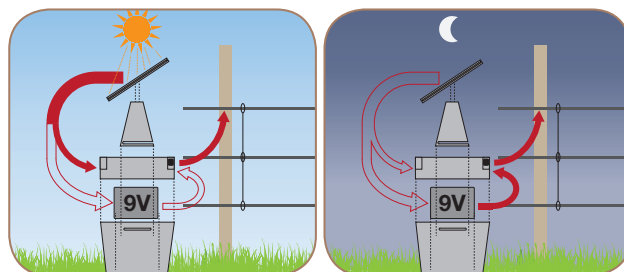
Earth stake, Part no. 14178  
(see p. 62)



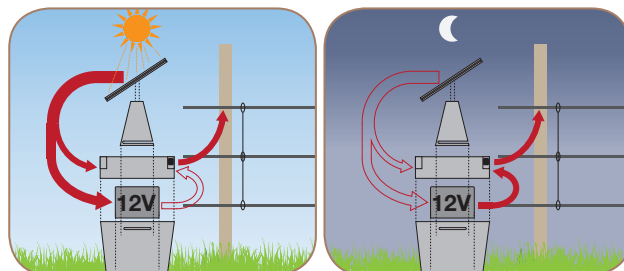
This energiser uses  
horizontal load sensing circuitry:  
= less strain on environment and reduced operation  
costs  
= By battery working, recharging isn't necessary so  
often, therefore perfect for solar



### Solar panel and 9V battery (with solarset 15264F)



### Solar panel and 12V battery (rechargeable)



Explanation of symbols for features of the energiser please find at folder.

\* The details refer to an arithmetical use of 100% of the indicated capacity.

ranger® B8, B6 and B4 are intelligent energisers with very high performances.

The intelligent eco-system and the horizont energy saving circuitry fits the output power to fence condition automatically. Power consumption is reduced. The saving energy per impulse could be used in the next impulse, if this is necessary. High electric fencing can be reached. The electric fencing range of ranger® B is suitable for multifaceted application, also on dry ground.

The electric fencing range of ranger® B is works safety and authentically effectively.



# ranger® B8

- Dry battery energiser, 0.75J Input, 0.65J max. Output
- For fences up to 12km with no load and 2km with heavy load



FAN



4 014803 011381

PC



# ranger® B6

- Dry battery energiser, 0.55J Input, 0.45J max. Output
- For fences up to 10km with no load and 1.5km with heavy load



FAN



4 014803 011367

PC

UV



# ranger® B4

- Dry battery energiser, 0.4J Input, 0.3J max. Output
- For fences up to 8km with no load and 1km with heavy load

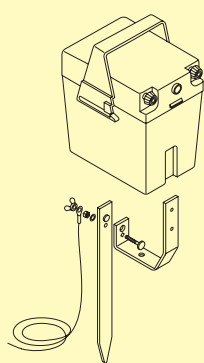


FAN



4 014803 001498

PC



Included in delivery:

- Fence and earth connection cable with strengthened plastic cover
- Earth stake with mounting rod part no. 88178

On well insulated fences use all 9V batteries. On badly insulated fences use 9V alkaline batteries with > 150Ah (see p. 58)  
Can be operated with a solar kit (see p. 47)!

- Possibility to be operated with 12 Volt rechargeable batteries (12 Volt connection cable as spare part available, part no. 90501C). (see p. 69)



- Dry battery energiser, 0.3J Input, 0.29J max. Output
- For fences up to 6km with no load and 1km with heavy load



FAM


















4 014803 037206

PC

UW



						9/12V	INPUT	max. OUTPUT		500 Ω 								
10841 ranger® B8	✓	✓	–	✓	✓	✓	0.75J	0.65J	10 000V	1 700V	20–90mA	20km	12km	5km	2km	–	1	2W
10840 ranger® B6	✓	✓	–	✓	✓	✓	0.55J	0.45J	9 500V	1 600V	15–70mA	12km	10km	4km	1.5km	–	1	2W
10445 ranger® B4	✓	✓	–	✓	✓	✓	0.4J	0.3J	9 500V	2 500V	16–44mA	10km	8km	3km	1km	–	1	2W
10555 ranger® B	✓	✓	–	✓	✓	✓	0.3J	0.29J	10 000V	2 200V	10–40mA	9km	6km	4km	1km	–	1	2W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

### HIGHLIGHT



Solarpanel  
see p. 49

Batteries up to 265 x 175 x 225mm can be placed in the box.

## ranger® AN3000

- Comfortable to carry – carrying handle with soft grip inlay
- Fence tension display with 6 LED's
- Agrutektor display with 6 LED's – shows when the energiser has a higher power consumption for keeping up the output
- Battery control display – 3 step display for detailed information
- Energy saving function – automatic regulation
- Solar charging controller with charging control display
- Earthing control
- Housing can be secured with a padlock
- **Delivery contains:**
  - Fence and earth connection cable with strengthened plastic cover



Part no.

EAN

10854



12/230V

- Handy transport box
- 12V battery is integrated in the energiser
- Battery is protected against weather conditions
- No contact with the battery when transporting



Also available: (10854GPSD see p. 14)

**GPS SMS MENU**  
SECURITY CONTROL FUNCTION

### ranger AN3000

Recommended solar panel

**1 x 20 Watt**

Part no. 140641 (see. p. 49)

Recommended battery  
≥ approx. operating time

**85 Ah**

Part no. 14894 (see. p. 68)  
up to 404 – 1888 hours  
(= approx. 16 – 78 days)\*



## Advantage: Dual energiser

The new dual energiser AN3000 are 12 Volt energiser. The connection for the 12 Volt battery is located on the inside of the energiser, so that a 12 Volt battery can be connected. On the reverse of the energiser there is an additional connection plug for a mains adapter. (Available as spare part with part no. 47PSU0008FUK).

With this mains adapter the energiser can be operated with 230 Volt. With the connection of mains adapter 47PSU0008FUK and 12 Volt battery.

The combi energiser can also operated in stand-by mode.

This means that as soon as 230 volt mains stops, the energiser automatically is operated with 12 Volt.

Now with:

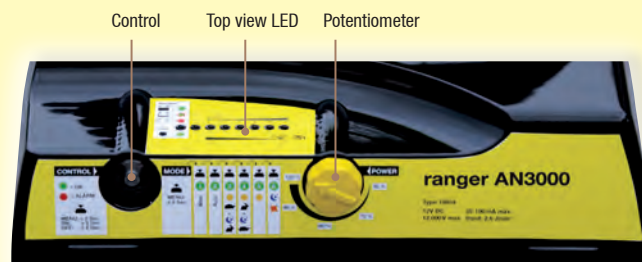
load sensing circuitry



### 6 Mode points:

1. NORMAL: Normal impulse sequence, output energy adjustable at the rotary potentiometer from 50% of the output energy
2. SMART: Normal impulse sequence, APN\*
3. DAY MODE: Normal impulse sequence at day, slow impulse sequence at night, APN\*
4. NIGHT MODE: Normal impulse sequence at night, slow impulse sequence at day, APN\*
5. SLOW MODE: Slow impulse sequence at day and night, APN\*
6. NIGHT-ONLY MODE: Normal impulse sequence at night, no impulse at day, APN\*

\*APN: Output energy selectable at the rotary potentiometer (100% – 50%) – automatic regulation by the energiser with load changing at the fence



	✓	2.7J	2.0J	14 000V	4 500V	45–210mA	40km	15km	4.5km	1.7km	10x50m	2x1m	20W
10854 ranger® AN3000	✓	0.7J	0.5J	5 600V	2 500V	40–85mA	14km	10km	4km	1.5km	–	1x1m	20W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



### Allrounder:

The farmer® energisers are especially designed for dry ground conditions. The AN energiser reach very high output voltages which offer high security.

Made in  
Germany

farmer®

i



### For dry ground

The farmer® series is ideally suitable for dry ground. This property supports the minding performance especially in very dry summer periods.

### Effective & gentle

Due to the wide impulse shape, the energy unfolds effectively and gently in the fence system!

### Current saving circuit

The farmer AN15, AN25 and AS70 energiser > pg. 27 are intelligent energisers with very high performances. The horizont current saving circuit automatically adapts the output power to the fence condition.

### Dual energiser

The farmer AN energiser can be operated simultaneously on the 230 Volt mains together with a 12 Volt battery. The energiser operates with priority on the 230 Volt mains and switches over to the 12 Volt backup supply automatically if the 230 Volt supply fails. The 12 Volt battery is charged on trickle charged by the optional mains connection

### Battery indicator

The voltage of the 12 V battery is displayed in 3 stages on the AN dual energiser and AS solar energiser. The stages are chosen to give optimum information about the battery condition.

## Chapter

## Page

farmer® series I Technology

26



230V

27

farmer® series I Mains energiser

230V

12V

27, 28

farmer® series I Dual energiser



9/12V

29

farmer® series I Battery energiser

farmer® series I Solar energiser

30





Approved and registered up to international regulations



UV-protected



Power- and battery consumption



Maximum fence voltage



Stored energy



Theoretical fence length (by CEE)



Fully insulated housing



Very solid PC-housing

Shower-proof

Control function

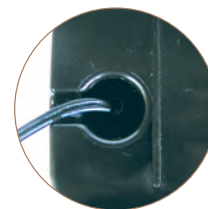
Battery control (at battery energisers)



LED display – 1 000 – 6 000 Volt



control function at AN15 / 25



Connection for mains adaptor on reverse

Earth control

Earth connection

Strong fence terminal

## Hint!

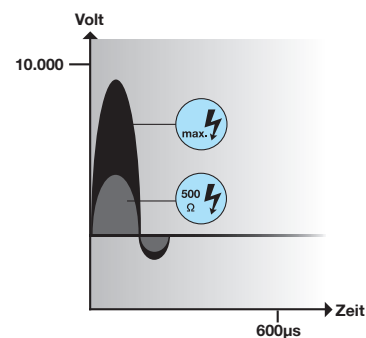
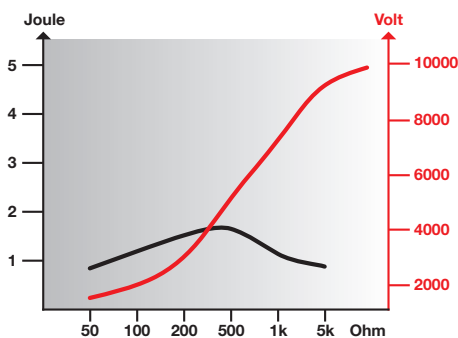
Fence control is easy to see from further distance as all indications are indicated by the energiser optically.

230 Volt adapter for combined AN energiser, part no. 47PSU0008UK (see p. 70)



## All-weather energiser in small compact housing

Our all-weather energiser 'farmer' in compact housing have output energies up to 2.5 Joules and voltage up to 10 000 Volt. The combined energiser AN15 and AN25 work with 12 Volt and can be operated with 230 Volt by using a separate mains adaptor.



- Compact all-weather energiser for various use in compact housing
- Output energy is available for big area of resistance values, because of this it is universal to use
- High voltages guarantees secure guarding



## farmer® N25

- Mains energiser, 2.5J Input, 1.6J max. Output
- For fences up to 15km with no load and 1.7km with heavy load



Part no.

EAN

10633UK (with UK plug)



## farmer® N15

230V

- Mains energiser, 1.6J Input, 1.0J max. Output
- For fences up to 10km with no load and 1.2km with heavy load



Part no.

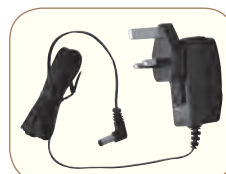
EAN

10632UK (with UK plug)

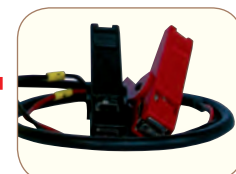


## Advantage: Dual energiser

The new combined energiser AN15 and AN25 are 12 Volt energiser. The connection for the 12 Volt battery is located on the inside of the energiser, so that a 12 Volt battery can be connected. On the reverse of the energiser there is an additional connection plug for a mains adapter. (Available as spare part with part no. 47PSU0008UK). With this mains adapter the energiser can operate with 230 Volts. With the connection of mains adapter 47PSU0008UK and a 12 Volt battery the combi energiser can also operated in stand-by mode. This means that as soon as 230 Volts mains stops, the energiser automatically is operated with 12 Volts.



230 Volt mains adapter  
47PSU0008FUK



12 Volt battery connection



This energiser uses

### horizont load sensing circuitry:

- = less strain on environment and reduced operation costs
- = by battery working, the recharging isn't necessary so often, therefore perfect for solar



## Dual energiser farmer® AN25

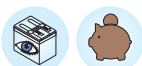
- Dual energiser, 2.5J Input, 2.0J max. Output
- For fences up to 15km with no load and 1.7km with heavy load



Art.-Nr.

EAN

10897



- Included in delivery:
- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel

1 x 20 Watt  
Part no. 140641 (see p. 49)

Recommended battery  
≥ approx. operating time

100 Ah  
Part no. 14126 (see p. 68)  
up to 526 – 2857 hours  
(= ca. 21,9–119 days)\*

Recommended transport box

Part no. 14129 (see p. 72)



12V

230V

Now with:  
load sensing circuitry



**Hint!** More information about discharge protection please find at page 67!

## Dual energiser farmer® AN15

- Dual energiser, 1.6J Input, 1.0J max. Output
- For fences up to 8km with no load and 1.2km with heavy load



Art.-Nr.

EAN

10896



- Included in delivery:
- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel

1 x 10 Watt  
Part no. 140631 (see p. 50)

Recommended battery  
≥ approx. operating time

88 Ah  
Part no. 14125 (see p. 68)  
up to 977–2933 hours  
(= ca. 40–122 days)\*

Recommended transport box

Part no. 14129 (see p. 72)



12V

230V

Now with:  
load sensing circuitry



	230V	12V	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡	🔋	CEE	max.	max.	max.	max.	max.	max.	max.
10633UK farmer® N25	✓	–	2.5J	1.6J	9 700V	5 000V	3.5W	50km	13km	4.0km	1.4km	10x50m	2x1.5m	–	–
10632UK farmer® N15	✓	–	1.6J	1.0J	9 500V	4 500V	3W	40km	10km	3.5km	1.2km	6x50m	1x1.5m	–	–
10897 farmer® AN25	✓	✓	2.5J	2.0J	12 500V	4 500V	35–190mA	50km	15km	4.5km	1.7km	10x50m	3x1m	20W	–
10896 farmer® AN15	✓	✓	1.3J	1.0J	11 500V	4 200V	30–90mA	30km	8km	3.5km	1.2km	6x50m	1x1m	10W	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

### farmer® AN1000

- Comfortable to carry – carrying handle with soft grip inlay
- Battery control display – 3 step display for detailed information
- Solar charging controller in the housing with 6.3mm flat connectors
- Housing can be closed with a padlock and also be secured
- Delivery contains:
  - Fence and earth connection cable with strengthened plastic cover

Batteries up to 265 x 175 x 225mm can be placed in the box.



Part no.

EAN

10855



ON/OFF

UV



12V



Recommended solar panel

**1 x 10 Watt**

Part no. 140631 (see p. 50)

Recommended battery  
≥ approx. operating time

**85 Ah**

Part no. 14894

up to 944 hours  
(= approx. 39 days) \*  
see. p. 68



- Handy transport box
- 12V battery is integrated in the energiser
- Battery is protected against weather influences
- No contact with the battery when transporting

### farmer® AN1000 with 10 Watt solar module

- Big solar module
- The solar module can be folded to the side, for an easy carrying
- Delivery contains:
  - Fence and earth connection cable with strengthened plastic cover



Part no.

EAN

10856



ON/OFF

UV



12V

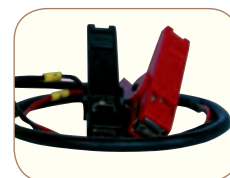


### Advantage: Dual energiser

The new dual energiser farmer AN1000 are 12 Volt energiser. The connection for the 12 Volt battery is located on the inside of the energiser, so that a 12 Volt battery can be connected. On the reverse of the energiser there is an additional connection plug for a mains adapter. (Available as spare part with part no. 47PSU0008FUK). With this mains adapter the energiser can be operated with 230 Volts. With the connection of mains adapter 47PSU0008FUK and 12 Volt battery. The combi energiser can also operated in stand-by mode. This means that as soon as 230 Volts mains stops, the energiser automatically is operated with 12 Volts.



230 Volt mains adapter  
47PSU0008FUK



12 Volt battery connection

	9V	12/230V	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡	🔋	CEE max.	max.	max.	max.	📏	📏	☀️
10855 farmer® AN1000	✓		1.4J	1.0J	11 000V	4 800V	90mA	40km	10km	3.5km	1.2km	5x50m	1x1m	10W
	✓		0.7J	0.5J	7 000V	3 200V	70mA	13km	10km	4km	1.3km	–	1x1m	10W
10856 farmer® AN1000 Solar	✓		1.4J	1.0J	11 000V	4 800V	90mA	40km	10km	3.5km	1.2km	5x50m	1x1m	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

**farmer B3**  
The classic energiser!

- Dry battery energiser, 0.25J Input, 0.19J max. Output
- For fences up to 5km with no load and 0.6km with heavy load

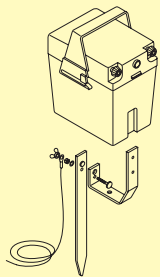


EAN

4 014803 001535

**Additional switch  
strong / extra strong!**

9/12V



- Included in delivery:
  - Fence connection cable kit part no. 15522 with fence and earth connection cable with strengthened plastic cover
  - Earth stake with mounting rod part no. 88178

- Operation with all 9 Volt dry batteries in big and small housing (see p. 66)
- Can be operated with a solar kit (see p. 47)
- Possibility to be operated with 12 Volt rechargeable batteries (12 Volt connection cable as spare part available, part no. 90501C) (see p. 69)

**farmer B2**  
The entry-level energiser!

- Dry battery energiser, 0.2J Input, 0.17J max. Output
- For fences up to 3km with no load and 0.5km with heavy load



EAN



4 014803 001542

9/12V



10450	farmer® B3	$\frac{12V}{9V}$	✓	-	✓	-	-	✓	-	✓	0.25J	0.19J	9 500V	2000V	$\frac{28/36mA}{24/28mA}$	8km	5km	3km	0.6km	-	1	2W
10441	farmer® B2	$\frac{12V}{9V}$	-	-	-	-	-	✓	-	✓	0.2J	0.17J	9 200V	1600V	$\frac{25mA}{32mA}$	5km	3km	1km	0.5km	-	1	2W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



### farmer® AS70

Environmentally friendly use of the sun energy!

- Compact solar energiser with integrated 12V battery
- Three step battery control display
- With automatic solar charging controller
- 230V charger for keeping up the charge of the integrated 12V battery
- Compact unit of energiser and solar module
- Integrated mount for earth post in the housing
- Robust plastic solar panel
- Energy saving function – automatic regulation
- Delivery contains:
  - Fence and earth connection cable with strengthened plastic cover
  - 230V mains plug for battery charging\*



Part no.

EAN

14475UK



### Hint!

Charge before use



Integrated solar panel



Integrated appliance for the earth stake



Integrated 12 Volt battery



Mains power socket 230 Volt\*



Integrated handle

	12V	INPUT	max. OUTPUT	max.	500 Ω		CEE	max.	max.	max.	max.		
14475UK farmer® AS70	12Ah	0.65J	0.50J	11 000V	3 600V	20–50mA	18km	16km	4.2km	1.6km	1x1m	10W	

\* Charge the battery only when the energiser is disconnected to the fence

Explanation of symbols for features of the energiser please find at folder.



Professional energiser for sheep, poultry, wolves and against wild animals: The energiser of the hotSHOCK® series prove effective under particularly difficult conditions such as sheep nets or wild animal defence fences in dense vegetation. This enables the impulse form designed especially for these difficult conditions.

Made in  
Germany

**hotSHOCK®**



### Ideal for long-haired, feathered and robust animals

The above mentioned, so-called difficult to keep animals are difficult to reach with the impulse of the electric fence because their bodies are protected by feathers, wool or thick bristles. The high voltage of the hotSHOCK® energiser is needed in the impulse in order to reliably deter the animals.

### High output energy

The energiser of the hotSHOCK® series have maximum output energy under dense vegetation conditions at the fence system. These are the classic vegetation conditions under which a sheep knotted mesh or a wild animal fence are operated.

### 3 connections

The hotSHOCK® energiser always have 3 connections. In addition to the output for earth, there are two fence outputs, one for the normal fence and another one for a small additional fence or a paddock.

The power at the second fence output is always limited to a safe level of less than 1 Joule. This achieves high safety e.g. for example for children playing nearby which is particularly important for fence systems set up near to the house.

## Chapter

## Page

hotSHOCK® series | Technology

32



230V

hotSHOCK® series | Mains energiser

32

12V

hotSHOCK® series | Battery energiser

33



9/12V

hotSHOCK® series | Battery energiser

33

hotSHOCK® series | Solar energiser

33





Approved and registered up to international regulations

**UV**

UV-protected

**max.**

Maximum fence voltage

**PC**

Power- and battery consumption

**PC**

Fully insulated housing

**INPUT**

Stored energy

**CEE**

Shower-proof

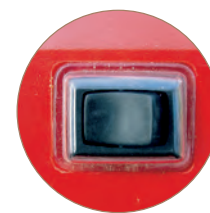
**CEE**

Theoretical fence length (by CEE)

**LED**

control function  
(at hotSHOCK A15 and A50)

LED display – 1 000 – 6 000 Volt at hotSHOCK N50)



**ON/OFF**

On- and Off switch  
for battery energiser  
A50

## Hint!

Fence control is easy to see from further distance as all indications are shown by the energiser optically.

## hotSHOCK® N50

- Mains operated energiser, 6.0J Input, 5.0J max. Output
- For fences up to 40km with no load and 10km with heavy load
- With function control lamp and 6-level LED indication bar



Part no.

EAN

**10614UK (with UK plug)**



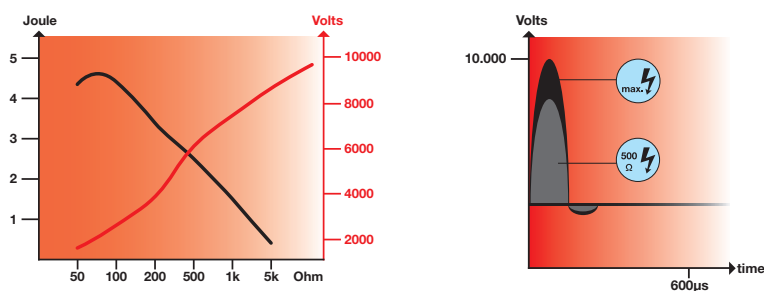
Earth connection

Very strong  
fence terminal

Strong fence terminal  
for paddocks and short pastures

## Special energiser for containment of sheep, poultry, the exclusion of wild predators and special applications

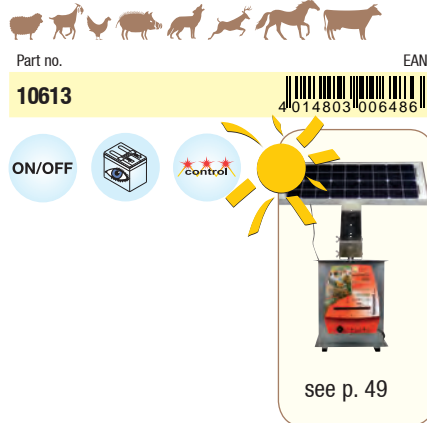
hotSHOCK energiser in big housing (N50, A50) always have 3 terminals. Besides terminal for earth connection, one fence terminal for normal fences and one additional for a small additional fence or a paddock. Power at second fence terminal is always limited to run at 0.5 Joules or less for where children are playing.



- Special energiser with high output energies at extremely low resistance
- Narrow impulse form allows energy to develop its power aggressively into fence system.  
This allows energy transport also at difficult conditions i.e. with heavy load at exclusion of wild predators or power loss at sheep netting where bottom horizontal line nearly always is lying on vegetation growth
- Due to high voltages specially long haired and unsensitive animals can be guarded securely

## hotSHOCK® A50

- Mains operated energiser, 4.2J Input, 3.0J max. Output
- For fences up to 30km with no load and 8km with heavy load



- **Included in delivery:**
  - Fence and earth connection cable with strengthened plastic cover

Recommended solar panel	<b>1 x 20 Watt</b> Part no. <b>140641</b> (see p. 49)
Recommended battery ≥ approx. operating time	<b>100 Ah</b> Part no. <b>14126</b> (see p. 68) up to 200 hours (= approx 8 days)*
Recommended transport box	Part no. <b>14129</b> (see p. 72)

**Hint!** More information about discharge protection please find at page 67

Also available: (10613GPSD see p. 14)

**GPS SMS**  
SECURITY CONTROL



## hotSHOCK® A15

- Mains operated energiser, 1.6J Input, 1.0J max. Output
- For fences up to 8km with no load and 1.2km with heavy load



- **Included in delivery:**
  - Fence and earth connection cable with strengthened plastic cover

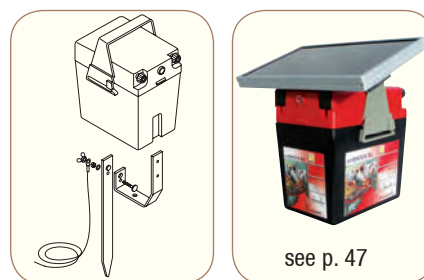
Recommended solar panel	<b>1 x 10 Watt</b> Part no. <b>14063</b> (see p. 50)
Recommended battery ≥ approx. operating time	<b>88 Ah</b> Part no. <b>14125</b> (see p. 68) up to 490 hours (= approx. 20,5 days)*
Recommended transport box	Part no. <b>14129</b> (see p. 72)



## hotSHOCK® B4

- Mains operated energiser, 0.4J Input, 0.35J max. Output
- For fences up to 6km with no load and 1km with heavy load

- **Included in delivery:**
  - Fence and earth connection cable with strengthened plastic cover
  - Earth stake with mounting rod part no. 88178



















- Useable with all dry batteries in small and big housing (see p. 66)
- Can be operated also with solar kit (see p. 47)
- Useable also with 12 Volt batteries (see p.69) (spare 12 Volt connection cable available, part no. 90501C)

## hotSHOCK® 9 Volt

Suitable for all unsensitive animals and long-haired animals



																
10614UK hotSHOCK® N50	✓	–	6J	5.0J**	9 000V	6 400V	8 000V	9W	120km	40km	20km	10km	16x50m	3x1.5m	–	
10613 hotSHOCK® A50	–	✓	4.2J	3.0J	12 000V	6 000V	10 000V	500mA	80km	30km	15km	8km	14x50m	3x1m	20W	
10638 hotSHOCK® A15	–	✓	1.6J	0.9J	10 600V	4 100V	–	90mA	30km	8km	3.5km	1.2km	6x50m	1x1.1m	10W	
10661 hotSHOCK® B4	9V	–	✓	0.4J	0.35J	10 000V	2 800V	35mA	–	10km	6km	2.5km	1km	3x50m	1	2W
	12V							30mA								2W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

EDITION



CAMOUFLAGE

Made in  
Germany

Camouflaged energiser:

The CAMOUFLAGE energisers colour blends in with the environment and is inconspicuous – prevents theft!



## Camouflage

- Battery powered energiser, 4,8J Input, 2,8J max. Output
- For fences without vegetation up to 70km and 6km with high vegetation



Part no.

EAN

10932CAMO



12V

UV

- Included in delivery:
- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel

**1 x 20 Watt**

**Part no. 140641** (see p. 49)

Recommended battery  
≥ approx. operating time

**100 Ah**

**Part no. 14126** (see p. 68)  
up to 208 hours  
(= approx. 8 days)\*

Recommended transport box

**Part no. 14129** (see p. 72)



10932CAMO



4.8J

2.8J

10 000V

5 100V

500mA

70km

25km

12km

6km

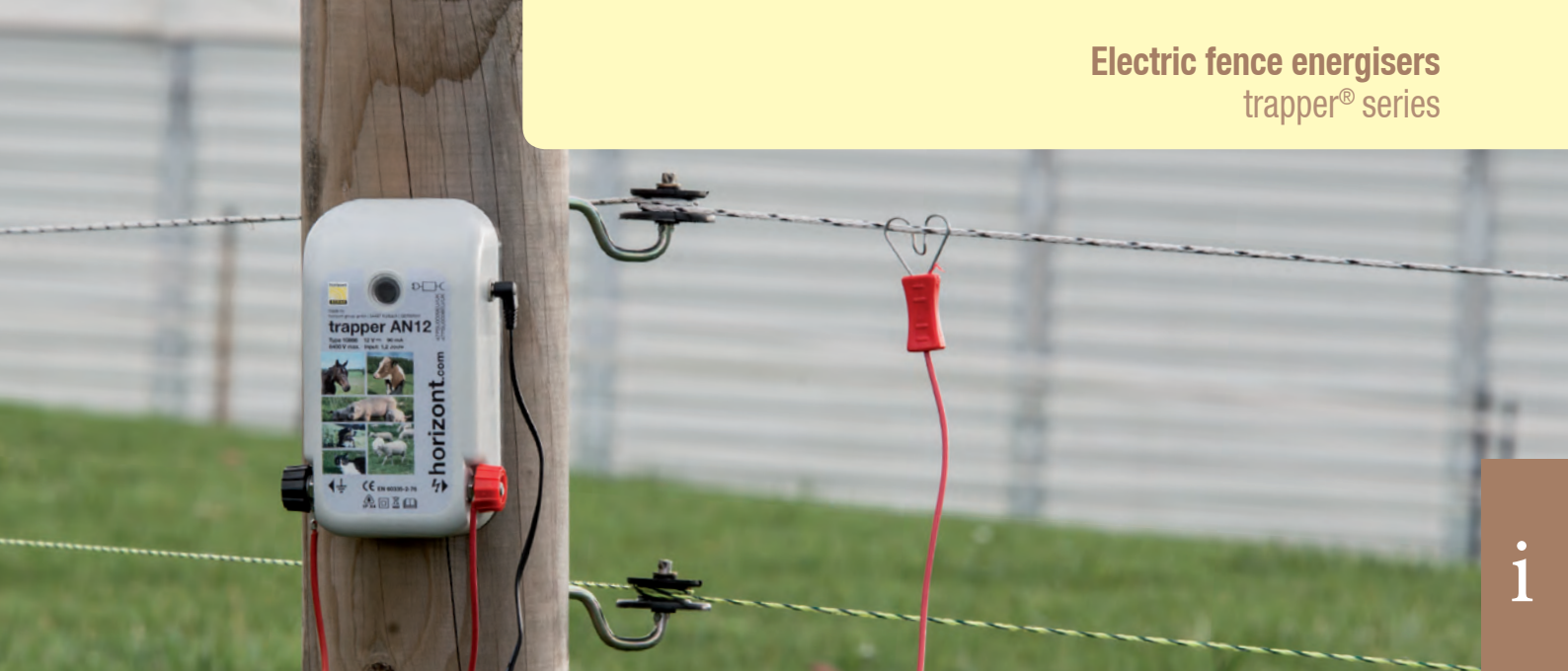
11x50m

3x1.5m

20W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



**Compact energiser:**  
trapper® units are compact and robust entrance energiser for multi purposes.

Made in  
Germany

**trapper®**

i



### Combi-energiser

The trapper® AN energiser can be operated either on 230 Volt or 12 Volt. The connection materials for both operating modes are included in delivery.

### Compact housing

The trapper® AN and N energiser have a slim, robust housing. This ensures long-lasting, easy-to-install energiser.

### Complete solar package

The trapper® AS energiser are fully-fledged solar energiser. The energiser are delivered with a 12 Volt battery and a mains adapter for recharging the battery.

### Battery indicator

The voltage of the 12 Volt battery is displayed in 3 stages on the trapper® AS energiser. The stages are chosen to give optimum information about the rechargeable battery condition.

### Solar charge control

The trapper® AS energiser are equipped with an automatic solar charge control. The battery is optimally charged.

### Chapter

### Page

230V

36

**trapper®—Serie I Mains energiser**

230V 9/12V

36

**trapper®—Serie I Combi energiser**



37

**trapper®—Serie I Solar energiser**





Strong fence terminal

Earth connection

- Connector for 12V or 230V
- Approved and registered up to international regulations
- Shower-proof
- handy housing (19 x 8 x 5cm)

### Handy combined energiser for 12 Volt / 230 Volt operation

trapper® combined energiser can be operated with 12 Volt or 230 Volt. They are perfect as a starter energiser and also for professional animal guarding of sensitive animals.

### Advantage: 2 in 1

Included in delivery!



trapper® combined energiser trapper® AN8, AN12 and AN24 allow the operation with 12 Volt batteries as well as with 230 Volt main power.

### Security hint !

While operating with 230 Volt main power, energiser and mains adapter should be installed in a room which is safe against water.



### trapper® AN24

- Dual energiser, 2.4J Input, 1.2J max. Output
- For fences up to 12km with no load and 1.5km with heavy load
- Function control
- Included in delivery: 12V connection cable, 230V line adapter, fence and earth connection



Part no.

EAN

10865UK



### trapper® AN12

- Dual energiser, 1.2J Input, 0.8J max. Output
- For fences up to 8km with no load and 1.5km with heavy load
- Function control
- Included in delivery: 12V connection cable, 230V line adapter, fence and earth connection



Part no.

EAN

10866UK



### trapper® AN8

- Dual energiser, 0.8J Input, 0.45J max. Output
- For fences up to 4km with no load and 0.8km with heavy load
- Function control
- Included in delivery: 12V connection cable, 230V line adapter, fence and earth connection



Part no.

EAN

10867UK



### trapper® N8

- Mains operated energiser, 0.8J Input, 0.45J max. Output
- For fences up to 4km with no load and 0.8km with heavy load



Part no.

EAN

10864UK



	230V	12V	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡	🔌	CEE	max.	max.	max.	📏	📏	☀️
10865UK trapper® AN24	✓	✓	2.4J	1.2J	8600V	4000V	145mA	18km	12km	5km	1.5km	6x50m	2x1m	
10866UK trapper® AN12	✓	✓	1.2J	0.8J	8400V	3600V	90mA	12km	8km	3.5km	1.2km	4x50m	2x1m	
10867UK trapper® AN8	✓	✓	0.8J	0.45J	7900V	3300V	50mA	8km	4km	2km	0.8km	2x50m	1x1m	
10864UK trapper® N8	✓	–	0.8J	0.45J	8000V	3900V	1.5W	15km	4km	2km	0.8km	3x50m	1x1m	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.



## trapper® AS

Environmentally friendly use of the sun energy!

- Compact solar energiser with integrated 12V battery
- Three step battery control display
- With automatic solar charging controller
- 230V charger for keeping up the charge of the integrated 12V battery\*
- Compact unit of energiser and solar module
- Integrated mount for earth post in the housing
- Robust plastic solar panel
- Energy saving function – automatic regulation
- Delivery contains:
  - Fence and earth connection cable with strengthened plastic cover
  - 230V mains plug for battery charging



Part no.	Product	EAN
14981UK	trapper AS20	4 014803 446770
14982UK	trapper AS35	4 014803 446787
14983UK	trapper AS70	4 014803 446794



ON/OFF

UV



### HINT!

Charge before use



Integrated solar panel



Integrated appliance for the earth stake



Integrated 12 Volt battery



Mains power socket 230 Volt\*



Integrated handle

	12V	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡	🔋	CEE 🏠	max. 🏠	max. 🏠	max. 🏠	🌧️	☀️
14983UK trapper® AS70	12Ah	0.65J	0.50J	11 000V	3 600V	50mA	18km	16km	4.2km	1.6km	1x1m	10W
14982UK trapper® AS35	7Ah	0.33J	0.25J	9 000V	3 000V	26mA	8.5km	5,0km	3,6km	0.9km	1x1m	5W
14981UK trapper® AS20	7Ah	0.18J	0.15J	7 500V	2 500V	17mA	3.7km	2.8km	0.9km	0.3km	1x1m	2W

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

### equiSTOP energiser for horses

Especially designed for fencing for horses, horizon has developed the equistop range. In this range there are two mains operated energisers, one 12 Volt energiser and two 9 Volt dry battery energisers. They are simple and easy to handle, especially for beginners, and deliver a good price/service balance. All energisers have attractive animal symbols on the housings and are, by their design, secure for use with horses.

#### equiSTOP M3 VCS (230V)

- Mains operated energiser, 3J Input, 2.3J max. Output
- For fences up to 20km with no load and 2km with heavy load
- With function control lamp and 6-level LED indication bar



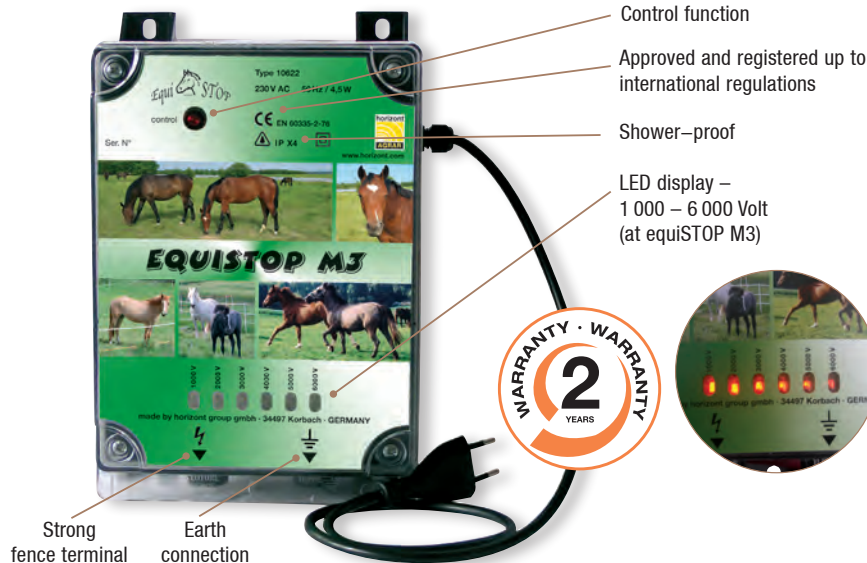
Part no.

EAN

10622UK (with UK plug)

4 014803 007230

PC UV



#### equiSTOP M (230V)

- Mains operated energiser, 0.8J Input, 0.45J max. Output
- For fences up to 4km with no load and 0.8km with heavy load



Part no.

EAN

14354UK (with UK plug)

4 014803 433183

ABS UV

#### equiSTOP M1 (230V)

- Mains operated energiser, 1J Input, 0.8J max. Output
- For fences up to 7km with no load and 1km with heavy load



Part no.

EAN

10621UK (with UK plug)

4 014803 007223

PC UV



#### equiSTOP A2 (12V)

- Battery energiser, 1.5J Input, 1.0J max. Output
- For fences up to 10km with no load and 1.5km with heavy load

##### Included in delivery

- Fence and earth connection cable with strengthened plastic cover
- Earth stake



Part no.

EAN

10623

4 014803 006882

PC UV

Recommended solar panel  
**1 x 10 Watt**  
Part no. 140631 (see p. 50)

Recommended battery  
≥ approx. operating time  
**88 Ah**  
Part no. 14125 (see p. 68)  
up to 550 hours  
(= approx. 23 days)\*

Recommended transport box  
**Part no. 15466** (see p. 72)

	230V	12V	LED	OK	INPUT	max. OUTPUT	max.	500 Ω	max.	CEE.com	max.	max.	max.	max.	max.	max.
10622UK equiSTOP M3 VCS	✓	–	✓	–	3J	2.3J	13 000V	5 200V	4.5W	60km	20km	6km	2km	2x1.5m	–	–
10621UK equiSTOP M1	✓	–	–	✓	1J	0.8J	8 500V	4 700V	2W	25km	7km	3km	1km	1x1.5m	–	–
10863UK equiSTOP M	✓	–	–	✓	0.8J	0.45J	8 000V	3 900V	1.5W	15km	4km	2km	0.8km	1x1.5m	–	–
10623 equiSTOP A2	–	✓	–	✓	1.3J	0.9J	10 000V	4 000V	90mA	30km	10km	4km	1.5km	1x1m	10W	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

## equiSTOP B2 (9 / 12V)

- Battery energiser, 0.3J Input, 0.22J max. Output
- For fences up to 5km with no load and 0.8km with heavy load
- Suitable also for long-haired horses
- Included in delivery
  - Fence and earth connection cable with strengthened plastic cover
  - The energiser could run with a 9V or a 12V battery
  - Earth stake



Part no.

10620

EAN



Fence output

Earth connection

Recessed grip for practical carry and carry-on of the solar module (part no. 60130; see p. 48)

On- and Off switch  
Control function

Approved and registered up to international regulations

Connection for earth stake with angled piece (part no. 88178; see p. 62)

Battery box appropriate for all dry batteries



see p. 48

## equiSTOP B1 (9 / 12V)

- Battery energiser, 0.18J Input, 0.12J max. Output
- For fences up to 5km with no load and 0.8km with heavy load
- Suitable for short-haired horses



Part no.

10619

EAN



## equiSTOP B2 Solar

Part no.

10624

EAN



- Useable with all dry volt batteries in small and big housing (see p. 66)
- The energiser can also run with solar panels (see p. 48)
- Can also be operated with 12 Volt wet batteries (12 Volt connection cable as spare part available, part no. 90501C). (see p. 69)

## HORSEGARD

### Electric fencing kit 6V for horses

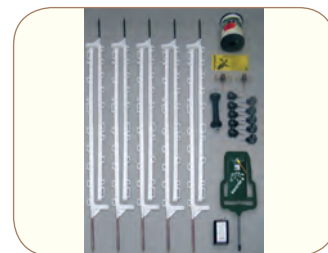
- Included in delivery
  - Small and handy fencer as power source equistop B for D cells 1.5V or 1 lantern battery part no. 253967 (incl.)
  - Earth stake
  - Fence and earth connection
  - 1 warning sign
  - 1 gate handle
  - 200m tape, white, 20mm wide
  - 10 ring insulators
  - 10 plastic posts, 108cm



Part no.

14115

EAN



## equiSTOP B (6Volt)

- A handy battery energiser for small animals and to protect plantations
- The unit can be operated either by 4 D cell batteries 1.5V or 1 lantern battery 6V, part no. 253967 or 23050 (batteries not included)
- Complete with line and earth connection cables and earth post, battery not included



Part no.

10448WR

EAN



Part no. 230502  
(see p. 67)

Part no. 253967  
(see p. 67)



	6V	9/12V	OK	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡		CEE ⚡	max. ⚡	max. ⚡	max. ⚡		
10620 equiSTOP B2	–	✓	✓	0.3J	0.22J	9000V	2200V	12V – 25mA   9V – 35mA	8km	5km	3.5km	0.8km	1	2W
10619 equiSTOP B1	–	✓	✓	0.18J	0.12J	8600V	1500V	12V – 15mA   9V – 22mA	4km	3km	1km	0.3km	1	2W
10448WR equistop B	✓	–	–	0.5J	0.15J	6500V	1000V	10/18mA	3km	1.5km	0.5km	–	1	–

\* The details refer to an arithmetical use of 100% of the indicated capacity.

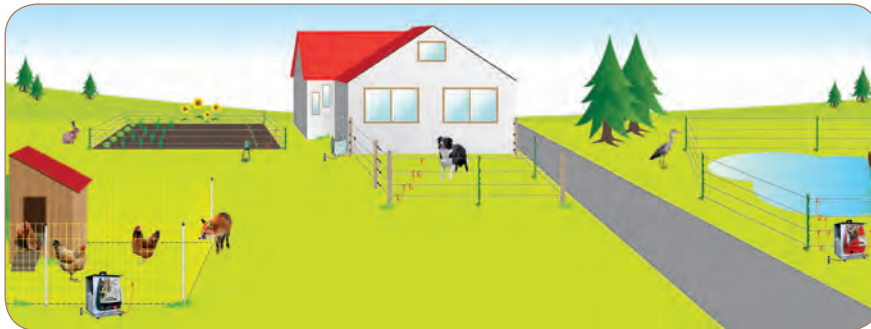
Explanation of symbols for features of the energiser please find at folder.

### Electric Fence for Dogs, Cats and other small animals

Electronic protection fences are designed to protect:

- Lawns and Flower beds,
- both contain and deter animals,
- is safe to both humans and animals.

Hobbygard products are especially developed an electronic fence system which is absolutely safe for humans and animals.



#### hobbygard® N (230 Volt)

- for protection of flower beds and vegetables against rabbits in connection with a fence net (see p. 140, 141)
- for protection of poultry fences against foxes in connection with a fence net or with fence tape (see p. 140, 141)

**included in delivery:**

- Earth post
- Fence and earth connection leads each 3m long



Part no.

EAN

104271UK (with UK plug)



A handy but efficient 230V mains energiser designed for gardens and flowerbeds, house and yard, as well as for cats, dogs and other small animals or short fences, also for horses.



#### hobbygard® A (12 Volt)

- for protection of flower beds and vegetables against rabbits in connection with a fence net (see p. 140, 141)
- for protection of poultry fences against foxes in connection with a fence net or with fence tape (see p. 140, 141)

**Included in delivery:**

- Earth post
- Fence and earth connection leads each 3m long



Part no.

EAN

103171



A handy but efficient 230V mains energiser designed for gardens and flowerbeds, house and yard, as well as for cats, dogs and other small animals or short fences. Complete with fence and earth connection, warning sign and earth stake.



#### hobbygard® B (6 Volt)

- A handy battery energiser for small animals and to protect plants
- The unit can be operated either by 4 D cell batteries 1.5V or 1 lantern battery 6V, Part no. 253967 or 23050 (not included)
- Complete with line and earth connection cables and earth post, battery not included



Part no.

EAN

10448



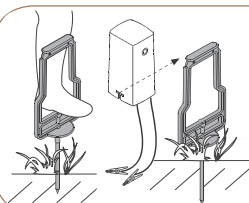
Part no. 230502  
(see p. 67)

Part no. 253967  
(see p. 67)



#### The energiser with built in earthing

Tread the earth stake into the ground and slide the energiser on to the earth stake. You only have to connect it and the unit is now ready to work.



	INPUT	max. OUTPUT	max. ⚡	500 Ω ⚡	⚡	CEE.com	max.	max.	+
104271UK hobbygard N	0.25J	0.15J	6500V	1 000V	2W	3km	1.5km	0,5km	1
103171 hobbygard A	0.25J	0.15J	6500V	1 000V	20mA	3km	1.5km	0.5km	1
10448 hobbygard B	0.5J	0.15J	6500V	1 000V	10/18mA	3km	1.5km	0.5km	1

\* The details refer to an arithmetical use of 100% of the indicated capacity.

Explanation of symbols for features of the energiser please find at folder.

## hobbygard-N-Set (230 Volt)

This kit contains

- 230V mains energiser hobbygard N, incl. earth and fence connection cable
- Earth spike and warning sign
- 100m spool of 8mm green polytape
- 1 tape connector
- 10 green polyposts each with a total length of 75cm above ground
- 10m insulated cable
- earth and fence connection cable, per 3 meters



Part no.

EAN

**140671UK (with UK plug)**



## hobbygard-B-Set (6 Volt)

This kit contains:

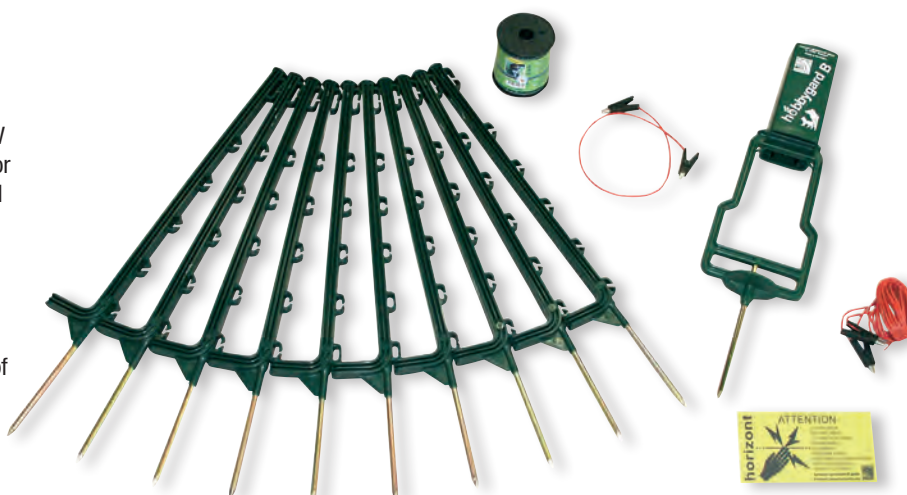
- hobbygard B for operation with 4 D cells 1.5V or 6V lantern battery 4R25, part no. 253967 or 23050 (batteries not included), incl. earth and fence connection cables
- Tread in earth spike and warning sign
- Warning sign
- 100m spool of 8mm green polytape
- 1 tape connector
- 10 green polyposts each with a total length of 75cm above ground
- Earth and fence connection cables



Part no.

EAN

**15561**



## 50m electrified poultry netting kit

Electrified poultry netting provides a low visibility, effective deterrent against most predators. Easily moved, stored and reerected, the poultry kit can be powered by mains (230V) or from 12V battery.

• Consists of:

- trapper AN12 Electric fence energiser complete with connection cable to 230V and 12V, earth and fence connection cable
- 50m 110cm (h) green netting with posts, guy ropes, pegs and repair kit
- 4 rigid double spike corner posts
- Earth stake
- Warning sign



Part no.

EAN

**14428UK**



HIGHLIGHT  
★★★★★



Please pay attention  
also to our gate for  
poultry netting  
(see page 142) !



## NG 1.1 • 9 V/12V

- Available in lime / turquoise / purple
- Portable application
- 9V battery is necessary
- Battery is stable in the casing



### Lime

Part no. EAN

**10921HG**



### Purple

Part no. EAN

**10921LI**



### Turquoise

Part no. EAN

**10921TU**



- 0.18J Input, 0.12J max. output
- Maximal fence voltage: 10 000V
- Fence voltage on 500 Ohm: 1 500V
- Power consumption: 25mA
- Max. fence length on CCE: max. 4km
- Fence length without vegetation: max. 3km



## NG 2.1 • 12 V

- Available in lime / turquoise / purple
- Portable application
- 12V battery is necessary
- Charging of battery is possible with solar panel



### Lime

Part no. EAN

**10929HG**



### Purple

Part no. EAN

**10929LI**



### Turquoise

Part no. EAN

**10929TU**



- 1.25J Input, 0.8J max. output
- Maximal fence voltage: 11 000V
- Fence voltage on 500 Ohm: 4 200V
- Power consumption: 90mA
- Max. fence length on CCE: max. 40km
- Fence length without vegetation: max. 10km



## NG 3.1 • 230 V

- Available in lime / turquoise / purple
- Stationary application
- 230V connection is necessary
- Safely erected on buildings



### Lime

Part no. EAN

**10941HGUK**



### Purple

Part no. EAN

**10941LIUK**



### Turquoise

Part no. EAN

**10941TUUK**



- 1.25J Input, 0.9J max. output
- Maximal fence voltage: 7 800V
- Fence voltage on 500 Ohm: 3 600V
- Power consumption: 2W
- Max. fence length on CCE: max. 40km
- Fence length without vegetation: max. 8km

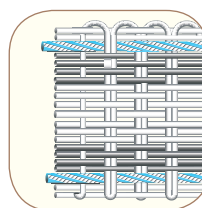


Choose your

Tape  
**TLDmax**  
TECHNOLOGY



Happy



Part no.	Product	Width	Colour	Spool	EAN	Piece
17136HG	Happy NT2.0	20mm	lime/white/lime	200m	4 014803 444677	1
17136LI	Happy NT2.0	20mm	purple/white/purple	200m	4 014803 444684	1
17136TU	Happy NT2.0	20mm	turquoise/white/turquoise	200m	4 014803 444691	1
17137HG	Happy NT4.0	40mm	lime/white/lime	200m	4 014803 444707	1
17137LI	Happy NT4.0	40mm	purple/white/purple	200m	4 014803 444714	1
17137TU	Happy NT4.0	40mm	turquoise/white/turquoise	200m	4 014803 444721	1

## Insulator for tapes and ropes

Part no.	Colour	EAN	Piece
15390HG-30	lime	4 014803 444646	30
15390LI-30	purple	4 014803 444966	30
15390TU-30	turquoise	4 014803 444942	30



## Ring insulator

Part no.	Colour	EAN	Piece
15370HG	lime	4 014803 444639	25
15370LI	purple	4 014803 444676	25
15370TU	turquoise	4 014803 444652	25



## Gate handle for openings in the fence

Part no.	Colour	EAN	Piece
15817HG	with hook, lime	4 014803 444660	1
15817LI	with hook, purple	4 014803 441638	1
15817TU	with hook, turquoise	4 014803 441614	1
15817C0-5	with hook, turquoise/lime, lime/purple, purple/turquoise	4 014803 446428	5

UV



## Polyposts „extra”

best possible application  
for all kind of practise

lime, total length 142cm, with 12 loops

Part no.	EAN	Piece
15545HG	4 014803 444653	1

purple, total length 142cm, with 12 loops

Part no.	EAN	Piece
15545LI	4 014803 441768	1

turquoise, total length 142cm, with 12 loops

Part no.	EAN	Piece
15545TU	4 014803 441690	1

horizont  
Top-Quality  
**extra**

WARRANTY - WARRANTY  
3 years

UV



our colour!



## stallmaster

- Especially developed circuitry where the output values are designed for stable applications (cow trainer)
- When there is a longer animal contact or a bypass in the system, the energiser shuts off after 4 – 5 impulses. The energiser resets if the power plug is pulled out of the electrical socket and put in it once again



Part no.

EAN

10430UK (with UK plug)



4 014803 003409

PC UV



Approved by Federal Office of veterinarian nature (BVET)

## scout N2 pigeon

- A special energiser only for use in deterring pigeons
- Undisturbed operate of energisers in buildings
- Radio – controlled very strong



Part no.

EAN

10407UK (with UK plug)



4 014803 001238

PC UV



## Complete solution for protection against pigeons

The problem:



The solution:



There are a number of reasons to keep pigeons away from houses and buildings. The pigeon carries disease causing agents which cause infection through dust and bacteria in droppings.

The pigeons carry parasites internally such as mites and pigeon ticks (and the pigeon causes a mess approx. 10 –12 kilos of wet droppings per pigeon per year).

The most effective methods to keep pigeons away are electric fence systems in connection with the special scout N2 energiser from horizont. These electric fence systems are almost invisible and can be adapted as flexible profiles to all buildings. The electrical conductors and connection elements are made of special alloys and create a lower resistance even on longer runs.

We operate in this field with many reputable specialists who offer tailor-made solutions at place for all such cases. Please do not hesitate to contact us – we will forward your enquiry.





# Energy

HIGHLIGHT



Solar panel + battery + device  
Solar supplement for the 9 volt  
operated battery and 12 volt  
battery devices for saving energy

> p.49

i

For the secure use of the energiser, a reliable energy supply is indispensable. The energy supply is eco-logically friendly when supported by solar solutions. In order to protect your animals, earthing and test instruments are necessary for security and high energy in the electric fence system.

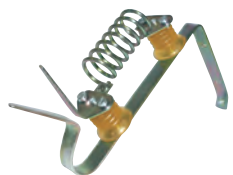


HIGHLIGHT



## Exciting

Fence tension tester for function  
control > p.55



HIGHLIGHT



## Lightning arrester

For use with mains energiser.  
A lightning protection system  
protects your energisers against  
damage by lightning. > p.58



HIGHLIGHT



## Portable power

Energy for your battery energisers!  
> p.66

## Chapter

## Page

Energy | Solar solution

46 – 53

Energy | Controlling and  
additional devices

54 – 57

Energy | Lightning protection,  
to switch, to connect

58 – 60

Energy | Earthing and  
accessories

61 – 64

Energy | Dry batteries

65 – 67

Energy | Battery, mains  
adapter, battery charger

68 – 70

Energy | Accessories

71 – 72



## Application of solar systems!

The sun as an energy source can be used for electric fence installations. Horizont 9V and 12V energiser as well as the combi unit trapper solar can offer this possibility. In the long term solar energy is both environment friendly and economical to run. The use of a solar unit even in our latitudes is possible without any restrictions from spring to autumn.



### 4 options of solar operation



Complete solution with integrated solar panel and strong 12 volt battery. Recharging the battery is possible when not in use with a battery recharger unit.



Solar operation for use with 9V fencers with special battery.



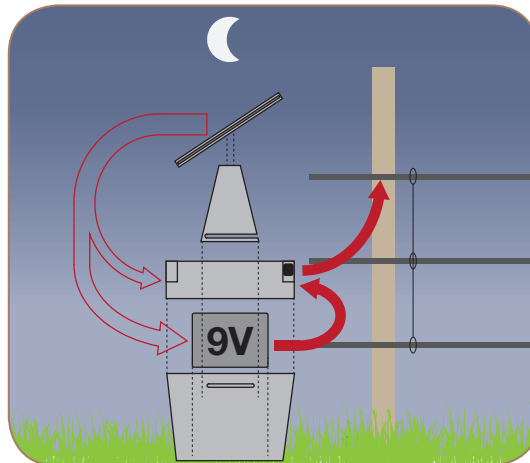
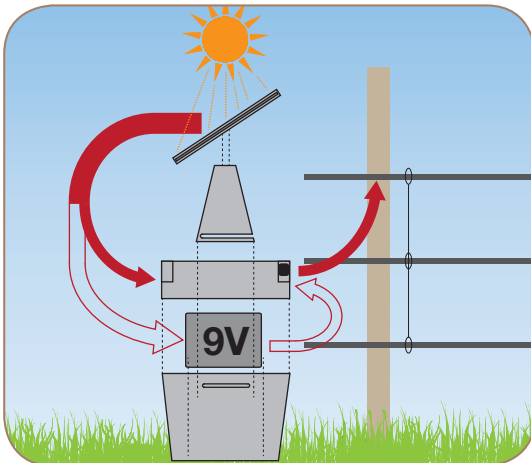
12 volt or 12/230 volt–arrangements consisting of an energiser and a battery can be extended with a solar panel.



12/230 volts of dual energisers in large housing can be extended by a solar panel fastened to the device for solar power usage.

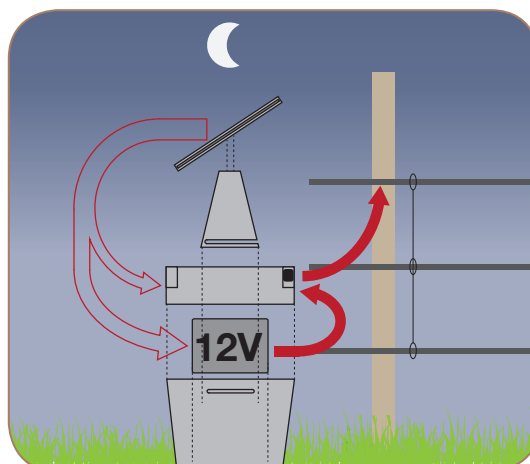
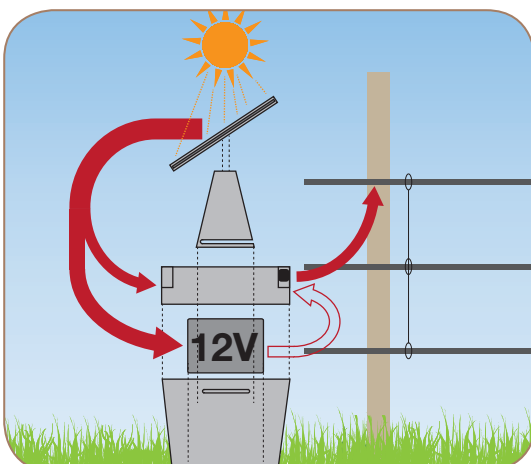
### 2 possible combinations with solar panel and 9V battery and 12V battery

#### Solar panel and 9V battery



During the day the solar energy is used. During the night the energy is provided by the battery. The device prefers to draw the supply through the solar panel. Only if this energy is no longer sufficient then the required energy is automatically taken from the 9 volt battery.

#### Solar panel and 12V battery (rechargeable)



As above, the 12 volt battery will be loaded with sufficient solar power.

## trapper AS / farmer AS

- Compact solar energiser with integrated 12V battery
- Three step battery control display
- With automatic solar charging controller
- 230V charger for keeping up the charge of the integrated 12V battery\*
- Integrated mount for earth post in the housing
- Robust plastic solar panel
- Available in three performance levels
- Delivery contains:
  - Fence connection set contains of fence and earth connection cable
  - 230V mains plug for battery charging



Part no.

EAN

**14981UK**



**14982UK**



**14983UK**



**14475UK**



ON/OFF

UV



INPUT

max. OUTPUT

max. 7

500 Ω

max. 17mA

max. 3.7km

max. 2.8km

max. 0.9km

max. 0.3km

max. 1x1m

max. 2W

max. 5W

Part no.	EAN	INPUT	max. OUTPUT	max. 7	500 Ω	max. 17mA	max. 3.7km	max. 2.8km	max. 0.9km	max. 0.3km	max. 1x1m	max. 2W
14981UK trapper® AS20	4 014803 446770	0.18J	0.15J	7 500V	2 500V	17mA	3.7km	2.8km	0.9km	0.3km	1x1m	2W
14982UK trapper® AS35	4 014803 446787	0.33J	0.25J	9 000V	3 000V	26mA	8.5km	5.0km	3.6km	0.9km	1x1m	5W
14983UK trapper® AS70	4 014803 446794	0.65J	0.50J	11 000V	3 600V	50mA	18km	16km	4.2km	1.6km	1x1m	10W
14475UK farmer® AS70	4 014803 448330	0.65J	0.50J	11 000V	3 600V	20–50mA	18km	16km	4.2km	1.6km	1x1m	10W

Explanation of symbols for features of the energiser please find at folder.

## Solarkit 2 Watt

- For horizont dry battery energiser since 1981
- The solar module will be supplied completely mounted on a handle. Simply slide this handle on to the housing and connect the leads
- With connection cables
- Inc. charge controller

Part no.

EAN

**15264F**



### You have two choices:

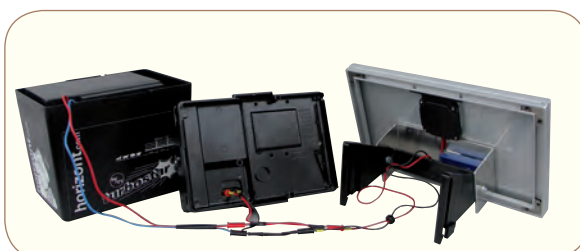
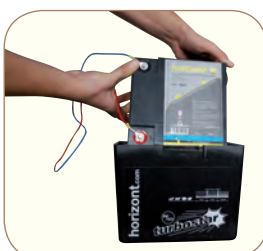
1. The panel works in parallel to the inbuilt 9V dry Battery (by day directly operated by the solar panel and by night driven by the battery).
2. The energiser also works with a inbuilt 12V Super Vlies battery, that will be charged by the panel.



This is the way to connect the Super-Vlies battery 15842 to the energiser !

Performance:  
Suitable for:

2 Watt  
all horizont battery energiser built from 1981 p.e. turbostar B, ranger B, horigard B, farmer B, hotSHOCK B4 a.o.)



## Solarkit 2 Watt

- For horizont dry battery energiser EquiSTOP B1, B2 and trapper B
- Easy to fix on to the handle of the housing
- The panel works in parallel to the in-built dry battery (with sufficient brightness the energiser will be directly operated by the solar module and as dusk starts it will be operated by the dry battery)
- The energiser is working also with a Super-Vlies battery, which can be loaded into the module

### Solar module with mounting

Part no.

EAN

60140



### equistop B2 solar, energiser incl. module

Part no.

EAN

10624



Performance:

2 Watt

Suitable for:

equiSTOP B1, equiSTOP B2

## Solar module, monocrystalline 50 Watt

- Self regulating solar module with charge controller
- Consisting of monocrystalline silicon cells
- Complete with connection cable, enclosed in a solid aluminium frame, also useful for smaller batteries
- Because of the size of the frame and the weight (wind load) please choose twice the mounting 14143

Part no.

EAN

14873



Performance:

50 Watt

Suitable for:

horiSMART AN160, hotSHOCK A50, ranger AN70

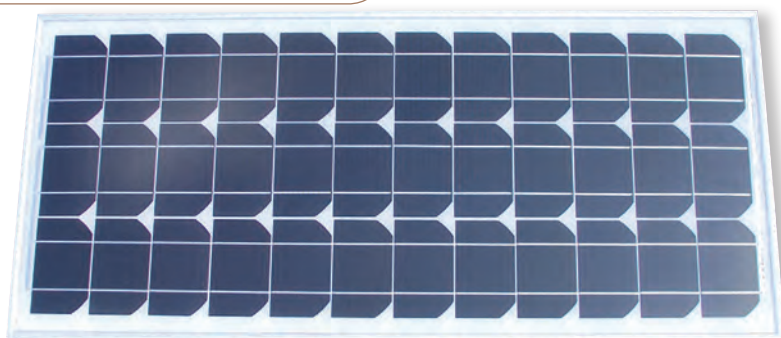
Battery

recommendation:

Special battery (230Ah, 100Ah) see p. 68

Dimension (LxWxH):

80.0cm x 56.0cm x 3.5cm



## Fixture for solar modles

- The angle of inclination can be set from 15 to 75 degrees
- Incl. all screws to fix the fixture



Part no.

EAN

14143



HIGHLIGHT  
★★★★★

## Monocrystalline solar module 20 Watt

- Solar module, consisting of monocrystalline silicium cells
- Complete with connection cables and aluminium frame

20 Watt

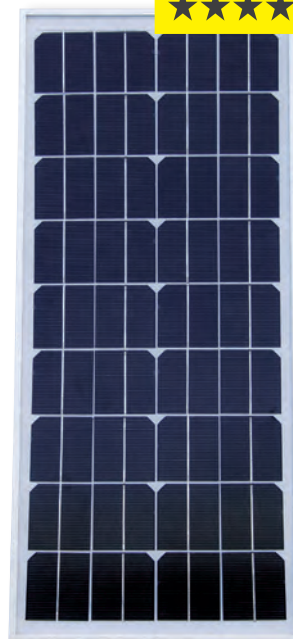
Part no.

EAN

140641



**Performance:** 20 Watt  
**Suitable for:** ranger AN50, ranger AN3000, hotSHOCK A50, farmer AN25 and other very strong 12 Volt– energisers  
**Battery recommendation:** all 12 Volt–Special–Batteries (100Ah, 88Ah, 63Ah) see p. 68  
**Dimension (LxWxH):** 67.2cm x 29.6cm x 2.5cm



## Monocrystalline solar module 20 Watt

- Same module as part no. 140641, but with mounting plate 14462 for ranger AN3000 (part no. 10854)

10 Watt

Part no.

EAN

14480



**Performance:** 20 Watt  
**Suitable for:** ranger AN3000  
**Battery recommendation:** Super–Vlies–Batteries 12V/80Ah see p. 69  
**Dimension (LxWxH):** 67.2cm x 29.6cm x 2.5cm



NEW

## Monocrystalline solar module 15 Watt

- Solar module, consisting of monocrystalline silicium cells
- Complete with connection cables and aluminium frame

15 Watt

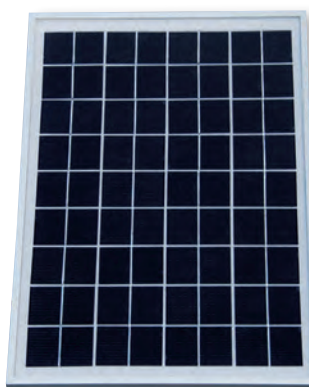
Part no.

EAN

141461



**Performance:** 15 Watt  
**Suitable for:** hotSHOCK A15, farmer AN15 / AN25 and equistop A2  
**Battery recommendation:** 12 Volt–Special–Batteries (63Ah, 85Ah, 88Ah, 100Ah) see p. 68  
**Dimension (LxWxH):** 64.7cm x 29.6cm x 2.5cm



i



## Monocrystalline solar module 10 Watt

- Solar module, consisting of monocrystalline silicium cells
- Complete with connection cables and aluminium frame

10 Watt

Part no.

EAN

140631



**Performance:** 10 Watt  
**Suitable for:** hotSHOCK A15, farmer AN1000, farmer AN15, equistop A2 and other 12 Volt energiser  
**Battery recommendation:** all 12 Volt–Special–Batteries (100Ah, 88Ah, 63Ah) (see p. 68)  
**Dimension (LxWxH):** 39.6cm x 29.6cm x 2.5cm



## Monocrystalline solar module 10 Watt

- Some module as part. no. 140631, but with mounting plate 14462

10 Watt

Part no.

EAN

14463



**Performance:** 10 Watt  
**Suitable for:** farmer AN1000  
**Battery recommendation:** Super–Vlies–Batteries (45Ah, 80Ah) (see p. 69)  
**Dimension (LxWxH):** 39.6cm x 29.6cm x 2.5cm



## Monocrystalline solar module 5Watt

- Solar module, consisting of monocrystalline silicium cells
- Complete with connection cables and aluminium frame

5 Watt

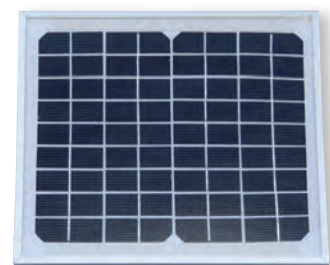
Part no.

EAN

141451



**Performance:** 5 Watt  
**Suitable for:** farmer A1000 and other energisers with reduced current consumption  
**Battery recommendation:** Special–Batteries (63Ah) (see p. 68)  
**Dimension (LxWxH):** 25.5cm x 29.6cm x 2.5cm



## Solar modul 5Watt with mounting incl. 14907

- Same module as part–no. 141451, but additionally with mounting plate and stake for easy adjustment of the solar panel to energiser „farmer A1000“, electrificable metal transport box, part–no. 14444 and the transport boxes part–no. 14129 and 15466 in connection with attach fixture 14156

5 Watt

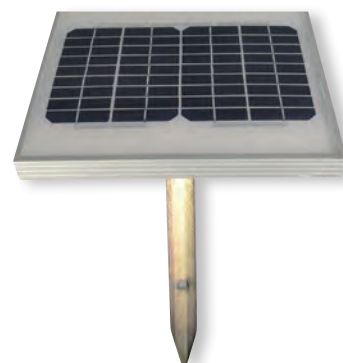
Part no.

EAN

14152



**Performance:** 5 Watt  
**Suitable for:** farmer A1000 and other energisers with reduced current consumption  
**Battery recommendation:** Special–Battery (63Ah) (see p. 68)  
**Dimension (LxWxH):** 25.5cm x 29.6cm x 2.5cm



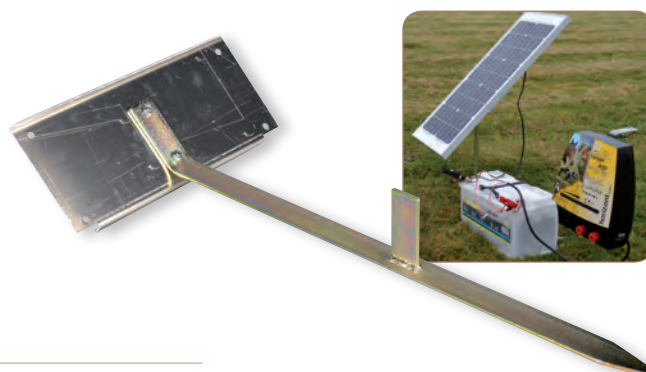
## Spike for solar panel incl. mounting plate

- This mounting solution consists of a mounting plate which is connected to the aluminium frame of the module and the metal stake with foot tread
- Suitable for 5, 10, 15 and 20 Watt panels
- Solar panels can be positioned next to the electric fence with the spike

Part no.

EAN

14923



## Attach fixture for solar modules

- This mounting solution consists of a mounting plate which is connected to the aluminium frame of the module. The mounting plate can be adjusted to the fixture (part no. 14192 and 14156)
- Suitable for 5, 10, 15 and 20 Watt panels

Part no.

EAN

14907



## Attach fixture for solar modules for metal transport boxes

- With this adjustment metal transport boxes can get a retrofit (Part no. 14444) also the transport box (Part no. 14129, 1500 and 15466)
- Suitable for 14907 (see. above) und 5, 10, 15 und 20 Watt Solarmodule (see p. 49 – 50)

1. Screw on the box
2. Stick the solar module on
3. Connect
4. Ready !

Part no.

EAN

14156



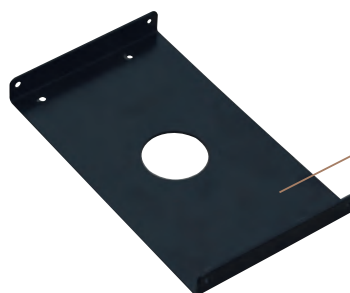
## Attach fixture for solar modules

- With this attach fixture all 5 – 20W solar panels can mounted on the fences ranger AN3000 and farmer AN1000
- Incl. all required fixings

Part no.

EAN

14462



## Attach fixture for solar modules for ranger energiser

- With this adjustment fixture energiser „turbostar AB“, „ranger A3000 / A2000“, „farmer A1000“ can get a retrofit
- Suitable for 14907 (see. above) und 5, 10, 15 und 20 Watt Solarmodule (see above)




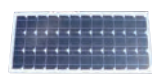





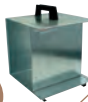


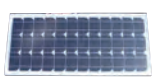


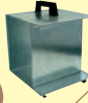


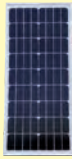













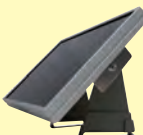

1. Screw the attach fixture to the farmer A- / ranger A / turbostar AB
2. Stick the solar module on
3. Connect
4. Ready !




















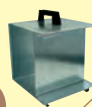












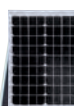


Part no.

EAN

14192

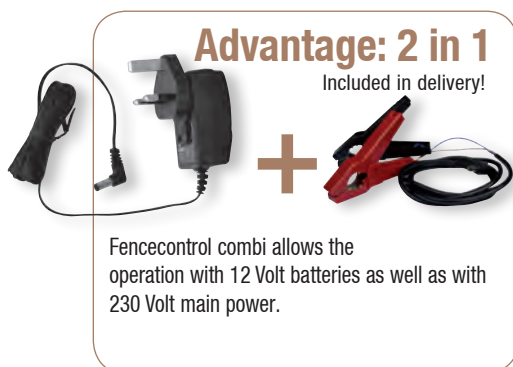


	Energiser	Transport box	Mounting	Solar module	Battery
horiSMART	 AN160 10749UK	21264 	2 x 14143 	14873 (50W) 	25012B (230Ah) 
turbostar	 B 10285	—	—	15264F (2W) 	12012 (165Ah) 15842 (12Ah) 
ranger	 AN70 10857	14129  14444 	2 x 14143 	14873 (50W) 	14126 (100Ah) 
	 AN50 10858	14129  14444 	14143 	140641 (20W) 	14126 (100Ah) 
	 AN3000 10854	—	—	14480 (20W) 	14894 (85Ah)  14479 
	 B - 10555 B4 - 10445 B6 - 10840 B8 - 10841	—	—	15264F (2W) 	15844 (120Ah) 12025 (26Ah) 
	 AN1000 10855	—	—	14463 (10W) 	14894 (85Ah)  14479 
farmer	 B3 10450 B2 10441	—	—	15264F (2W) 	15842 (12Ah) / 15509 (75Ah) 

	Energiser	Transport box	Mounting	Solar module	Battery
farmer	 AN25 10897	 14129  14444	 14143	 140641 (20W)	 14126 (100Ah)
	 AN15 10896	 14129  14444	 14143	 140631 (10W)	 14125 (88Ah)
hotSHOCK	 A50 10613	 14129  14444	 14143	 140641 (20W)	 14126 (100Ah)
	 A15 10638	 14129  14444	 14143	 140631 (10W)	 14125 (88Ah)
	 B4 10661	+	—	+	—
Camo	 10932CAMO	+	+	+	 140641 (20W)  14126 (100Ah)
EquiSTOP	 A2 10623	 14129  14444	 14143	 140631 (10W)	 14125 (88Ah)
	 B2 10620 B1 10619	+	—	+	—

i





### 12 Volt / 230 Volt

Part no.

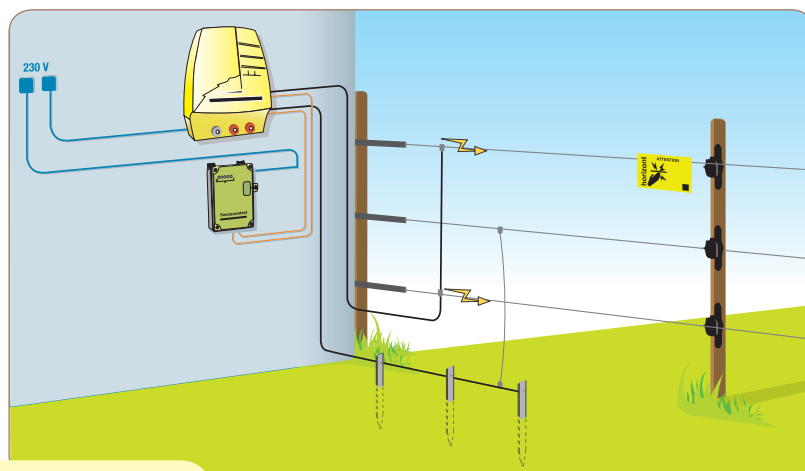
EAN

10859UK



### Fence controller – control device for 12 Volt or 230 Volt operation

- This control device allows a permanent and secure control of your electric fence, no matter which type of energiser is used
- Three LED diodes inform you about the fence circumstances
- For connection of all 230 Volt and 12 Volt operated energiser
- Dry contact, closing when the fence voltage drops below a preset level
- Optical and acoustical signal generator can be connect



- All three diodes are blinking:** Fence voltage is very good!
- Two diodes are blinking:** Fence voltage is good!
- One diode is blinking:** Fence voltage is enough – possibly cut vegetation growth
- No diode is blinking:** Fence voltage is not enough to secure safe guarding

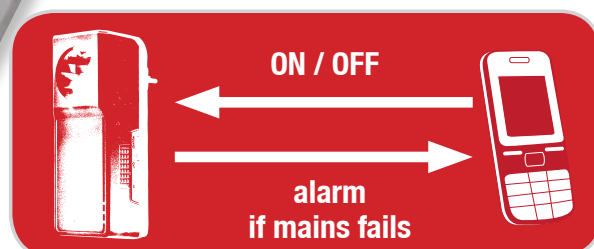
### SMS socket-outlet

- Simple regulating by text or call
- Alarm message in case of power failure
- Switchable from anywhere, where you can find adequate network coverage
- The SIM-card is not included
- To be installed in a room which is protected against humidity

Part no.

EAN

14936



## fence scout II – fault finder!

- Effective range up to 10 000 Volts
- Display for electrical current flow direction on fence
- Directional sign for problems on the electric fence
- Measurement is only possible on the fence



Including battery!  
Including bag !

## 3 in 1 Tester for: Fence voltage + intensity of current + fault finder

Part no. **14151C** EAN **4 014803 141514** Piece **1**



- Pressure display
- Power display
- Fault display
- Display light
- Signals acoustical
- Battery display

## Digital–Voltmeter

- To accurately monitor the fence voltage at any place along the fence line. The output energy can also be measured at the energiser directly
- The digital voltmeter monitors voltages between 200 and 9 900 Volts. Impulses higher than 10 000 Volts gets monitored by showing „HI“
- The tester operates with a 9 Volt block container battery and switches itself on and off automatically
- Supplied with handy belt–bag



Including battery!  
Including bag !

Part no. **14673C** EAN **4 014803 146731** Piece **1**

## fence tester Plus

- The handy fence tester for easy and simple determination of the fence voltage level
- No earth necessary
- To operate press the metal loop against the fence material and depress the central button
- 6 control displays, 10 000, 8 000, 6 000, 4 000 and 2 000 Volts and display under 2 000 Volts
- Measurement only possible on fence
- Control display for battery
- Use with 9 Volt block



Including battery!



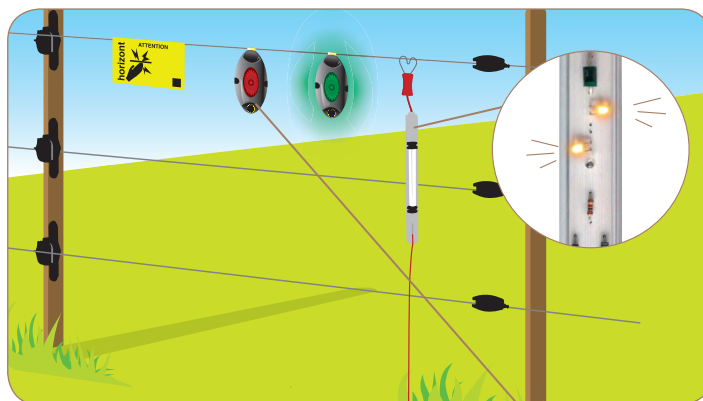
Part no. **14394C** EAN **4 014803 143945** Piece **1**

HIGHLIGHT ★★★★★

### Fence voltage indicator

Designed in the style of a neon tube with LEDs

- To be connected to the fence
- Flashes in the rhythm of the impulses. Can be seen in the dark from a considerable distance to show the fence is working
- If the fence voltage falls below 2 000 Volts the light will stop flashing
- Also acts as a predator deterrent



**flashes if fence voltage is over 2 000 Volts**

Part no.

**10424C**

EAN



Piece



Operation without battery!

### Volt-alarm

- This control device shows you the function of your fence
- To clip on to the fence line (no earth connection needed)

With a switch on the front side of the device you can choose two levels:

- Level 1: the indication lamp starts blinking if fence voltage drops below 2 000 Volts
- Level 2: the indication lamp starts blinking if fence voltage drops below 4 000 Volts



**flashes if fence voltage is under 2 000 / 4 000 Volts**

Part no.

**15537C**

EAN



Piece



Including battery!



### Fence control device FLASH 2 000

- Fence control device FLASH 2 000 shows to the user, if the fence is working
- FLASH 2 000 flashes with each impulse and stops flashing when fence voltage drops under 2 000 volts
- Additional deterrent for wild predator
- Very useful as optical function control at darkness and at dawn
- To clip on to the fence line (no earth connection needed)
- Just clip flash 2 000 to existing fence material and it starts working (does not need to be earthed)



**flashes if fence voltage is over 2 000 Volts**

Part no.

**14149C**

EAN



Piece



Including battery!

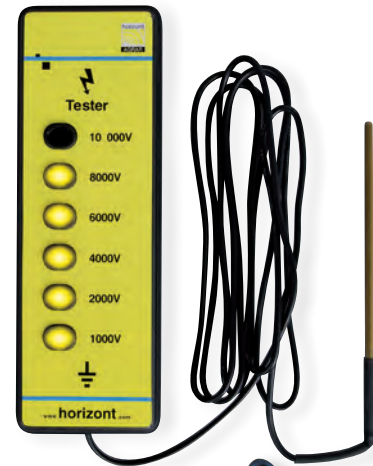


## ISOTESTER 10 000

- Measures up to 10 000 Volts
- Displays the voltage in 6 levels: 2 000 up to 10 000 Volts
- Useful also for checking the output voltage on the energiser
- Offers an easy and fast reading of the fence condition
- Indispensable for every day work on the fence
- Isotester 10 000 is working without battery

Part no. **14670C** EAN  Piece 

Operating without battery!

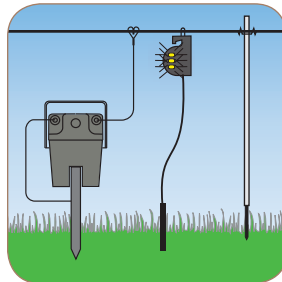


## ISOTESTER 6 000

- Allows easy and fast reading of your fence
- The control lamp of the 1-level tester will indicate a fence voltage of minimum 2 000 Volts
- The 3-level tester shows the fence voltage on three levels: 2 000 Volts, 4 000 Volts and 6 000 Volts

Part no. **14082C** EAN  Piece 

Operating without battery!



## International warning sign „Caution electric fence“

- Every part of an electric fence, which is installed besides a public street or a public way, must be marked at constant intervals of approx. 100m, by warning signs. The warning signs have to be fixed safely on fence posts or on fence ropes
- Complete with 8 ties for secure fastening for all polytapes, polywires and electrical ropes
- Measures: 20cm x 10cm



### text on both sides

Part no. **14127** EAN  Piece   
**14127C** EAN  Piece 

### text on one side\*

Part no. **15317** EAN  Piece   
**15317C** EAN  Piece 

\* for example for use on fences besides buildings

Warning signs must be  
printed double-sided  
and be easily readable !

## International warning sign „Caution electric fence“

- Every part of an electric fence, which is installed besides a public street or a public way, must be marked at constant intervals of approx. 100m, by warning signs. The warning signs have to be fixed safely on fence posts or on fence ropes
- Complete with 8 ties for secure fastening for all polytapes, polywires and electrical ropes
- Measures: 20cm x 10cm



### text on both sides

Part no. **14481** EAN  Piece **1**

### same as 14481, but with customer specific print\*\*

Part no. **14482** EAN  Piece **1**

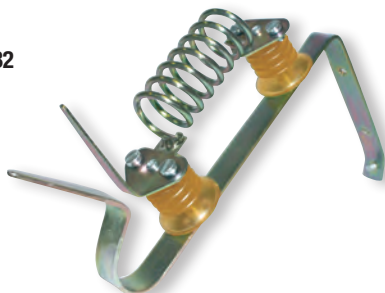
\*\* minimum order quantity: 400 pcs.!



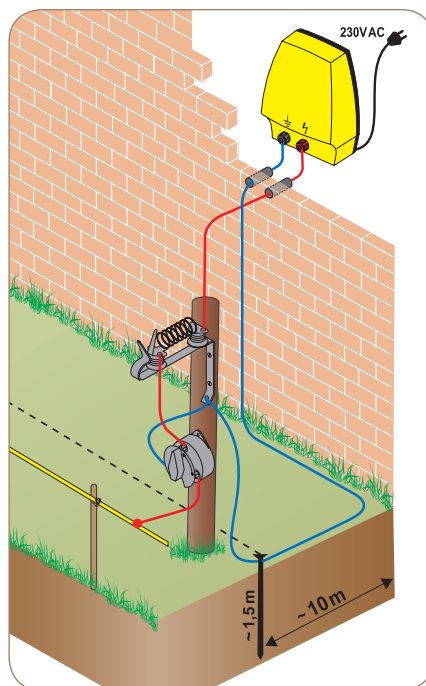
## Lightning arrester kit (for bigger installations)

- Protects your energiser against damage from lightning strike and power surge
- Includes 2 anti-lightning insulators, 1 arrester coil and 1 cut-out switch
- The cut out switch can also be used to turn your fence installation on/off

15482



10319C



### Hint!

Energiser with two outlets require two lightning arrester kits!

Part no.	Product	EAN	Piece
15498C	complete	4 014803 405760	1
15482	Arrester coil, single	4 014803 4154828	1
10319C	Cut-out switch, single	4 014803 405944	1

## Safety hint!

Don't mount the energiser inside buildings next to flammable materials for example barns or stables.

To protect the energiser from lightning, mount in the fence connection a lightning arrester outside the building or close to the entry of the connection. The lightning arrester must be connected to the earth.

The installation must be done by a specialist. Experience shows, that mains energiser are damaged more often by lightning than battery energiser. Therefore it's necessary to use a lightning arrester. Follow the instructions for mounting the arrester kit.

Don't connect the fence earth and the earth from the building.

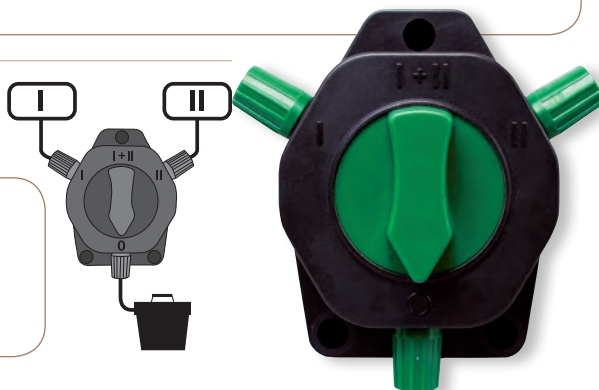
## Fence switch

- To switch current independently from the energiser
- Two outlets can be controlled

Part no.	EAN	Piece
14865C	4 014803 148650	1

Positions of the switch:

0	=	off
I	=	fencing 1
II	=	fencing 2
I+II	=	fencing 1 and 2



## Lightning arrester (for energiser < 1 Joule)

- For the installation on the wall or on the fence
- It protects the energiser by conducting the lightning into the ground

Part no.	EAN	Piece
14085C	4 014803 428707	1



## On / Off switch

- Usable for switching the electricity on and off independently from the energiser
- For switching individual fence sections on and off

Part no.	EAN	Piece
14084C	4 014803 428691	1



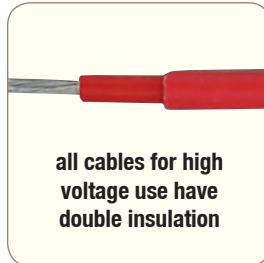
## Fence connection cable „universal” type

- The ideal connection between energiser and fence line
- Especially, for tapes to ensure ideal pressure contact to the conducting wires
- May also be used with polywires and ropes
- More security by ensuring optimum current flow through ideal contact pressure
- Total length 100cm

Part no.

EAN Piece

10286C



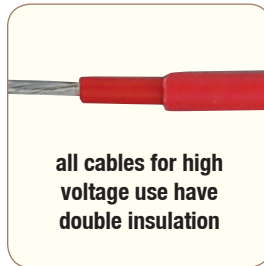
all cables for high  
voltage use have  
double insulation



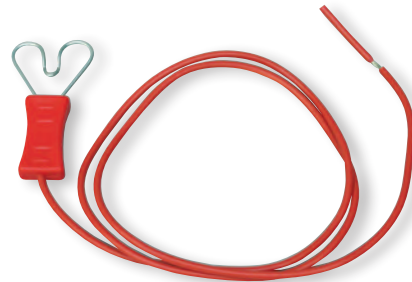
For safe contact –  
especially on higher energies!

## Fence connection cable

- With heart clip, 100cm long, cable incorporating reinforced plastic cover to protect against possible short circuits
- Suitable for connection to wire, twines and 12mm tape
- Total length 100cm



all cables for high  
voltage use have  
double insulation



### without plug

Part no.

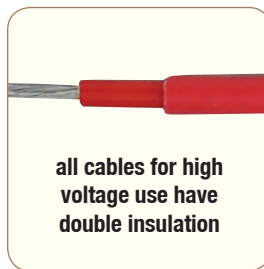
EAN Piece

90676C



## Line connection kit

- Consists of line connection cable 90676C, 100 cm long, with reinforced plastic covering plus earth connection cable
- The heart clip is suitable for connection to wire, twines and 12mm tape



all cables for high  
voltage use have  
double insulation



### Safety hint!

The heart clip is equipped with a reinforced plastic covering to avoid arcing.

### without plug

Part no.

EAN Piece

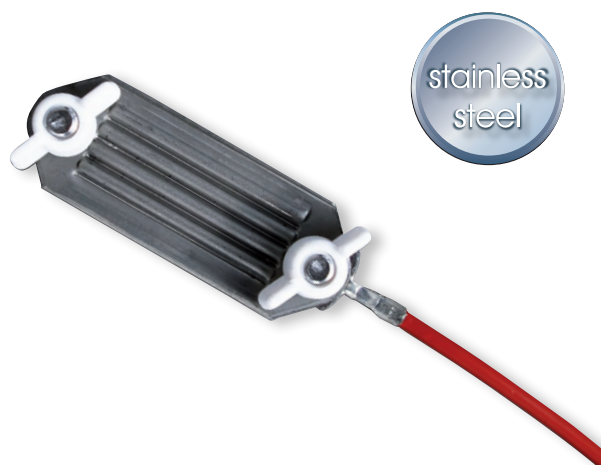
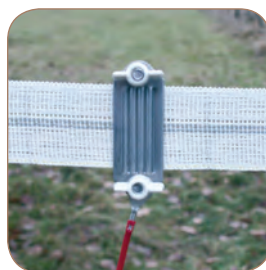
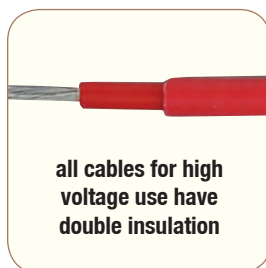
15522C





### Fence connection cable for wide tape

- Ensuring a perfect connection between energiser and fence
- The ideal connection between energiser and fence line, especially when using tape up to 40mm
- Total length 100cm

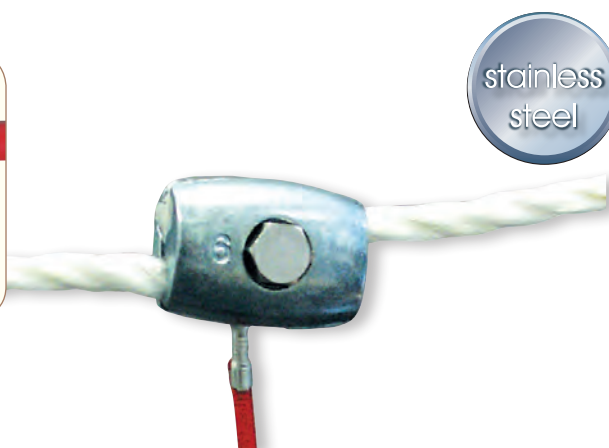
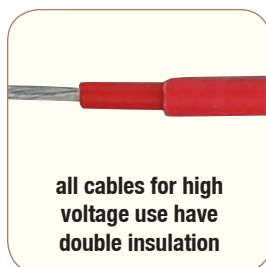


For safe contact – especially with higher energy for connection to tape!

Part no. **10447C** EAN **4 014803 405579** Piece **1**

### Fence connection cable „rope 6mm“

- This connection cable guarantees optimum connection between energiser and polycords up to 6mm ø
- Total length 70cm



For safe contact – especially with higher energy for connection to electric ropes with an diameter up to 6mm!

galvanized

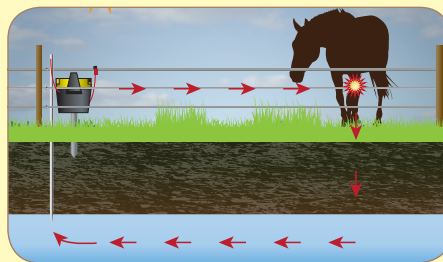
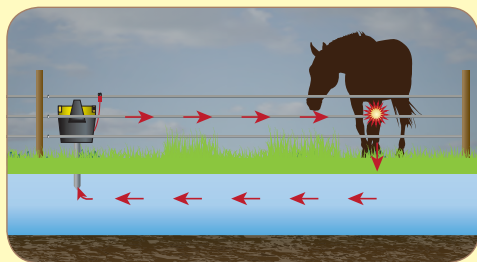
Part no. **10593C** EAN **4 014803 410593** Piece **1**

stainless steel

Part no. **10594C** EAN **4 014803 410594** Piece **1**

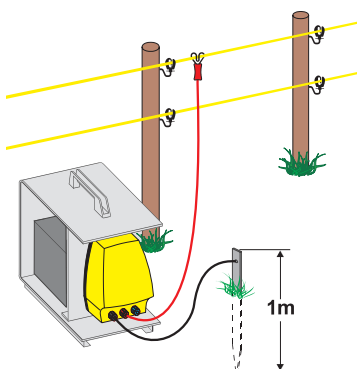
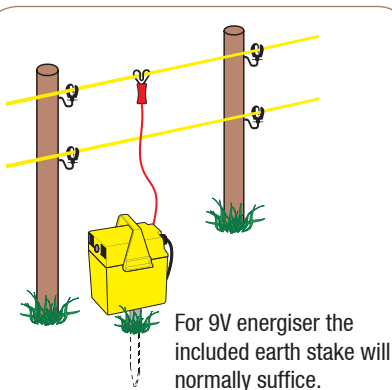
## The earthing of an electric fence

A good earth is essential for a well installed and effective electric fence. As the electric fence is an „open circuit“ the current originating from the energiser transmitted via the wire, across the normal earth and via earth pegs, needs to flow back to the energiser. If the circuit is not closed there will be no current flow, animals will not be deterred and the fence will not work. On sandy, stony and very dry ground the earth will only poorly conduct the current. That is when good earthing is even more important. From the energiser the earth cable connects to the earth post establishing the contact from the energiser to the ground. For lower energy energiser very often a small earth stake similar to the one included in horizon energiser will be sufficient. For battery energiser we recommend to use approximately 1 metre long earth stake and for mains energiser 2 – 3 such earth stakes which are connected to each other. If you can still feel voltage on your earth post the earthing is not ok. Just install a second or maybe a third earth stake in distances of 1 metre apart and connect the earth posts with an earth cable.

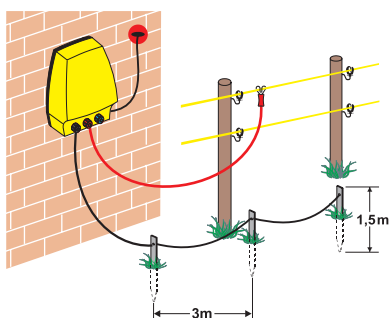


### Hint!

Compare quality of earth posts. horizon earth posts are made of 3mm galvanised steel and more solid than standard earth posts!



For battery energiser take 1 metre long earth stake and drive it into the ground.



For strong mains energiser connect 2 – 3 earth stakes 1 – 2 metres long to each other. Only if there is no more current on the last earth post is your grounding sufficient.

### T-earth stake

- Solid galvanised T angle earth post complete with a wire joint connector.
- We recommend 1 m posts for all 12 Volt battery energiser and the solar energiser trapper and farmer AS
- We recommend 1.5m posts for all 230 Volt mains energisers

#### Total length 150cm, 3mm thick

Part no.	EAN	Piece
15017	4 014803 150127	3
15017-1	4 014803 434272	1

#### Total length 100cm, 3mm thick

Part no.	EAN	Piece
14041	4 014803 140418	3
14041-1	4 014803 434265	1

### Earth stake, round, galvanized

- Very solid earth stake made of galvanized round steel post, complete with connection screw
- Diameter 13mm

#### Total length, 100cm

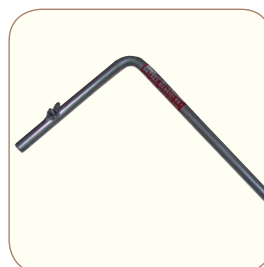
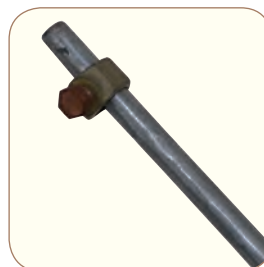
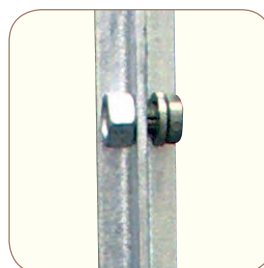
Part no.	EAN	Piece
14199	4 014803 141996	3

### Earth stake, standard

- Earth stake made of galvanized round steel post
- Complete with mounting for the energiser equistop M and trapper AN24, AN12, AN8, N8 and hobbygard N and A

#### Total length, 50cm

Part no.	EAN	Piece
14355	4 014803 143556	1

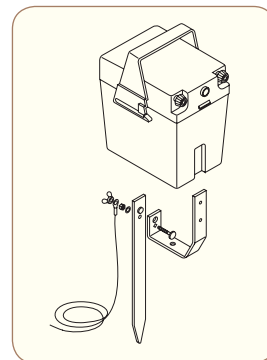




## Earth stake with mounting rod

- This galvanized earth stake is supplied complete with screws and nuts
- Complete with bottom part (80054) and angle (83449)  
Suitable for: 9V horizon energiser from 1981 onwards (currently e.g. turbostar B, ranger B, B4, B6, B8, farmer B3 and B2)

Part no.	Product	EAN	Piece
88178	Set complete	4 014803 881786	1
80054	Bottom part, single	4 014803 882370	1
83449	Angle part, single	4 014803 882387	1



## Earth stake

- All 9V energiser can be mounted on the four-footed earth stake
- Just drill a hole into the battery housing
- The earth stake should bolt hard to the energiser

### Length 25cm

Part no.	EAN	Piece
14178	4 014803 141781	1

- Easy for setting up
- Easy for delivery
- Easy for use



## Earth stake

- All housings of the energiser shown below can be mounted on the stable earth stake

### Length 66cm

Part no.	EAN	Piece
14899	4 014803 148995	1

- Easy for setting up
- Easy for delivery
- Easy for use

### Hint!

For bigger enclosures and higher energy please attach the earth stake suggestions for energisers!



## Earth cable 90cm complete with screw

- Earth cable complete with screw for secure fastening at the earth stake
- Cable length: 90cm

Part no.

EAN

Piece

90150C



all cables for high  
voltage use have  
double insulation



## Energiser- and earth connection kit

- Consists of earth stake, fence connection cable, 2m long and earth connection cable, 3m long and warning sign

Part no.

EAN

Piece

15858C



all cables for high  
voltage use have  
double insulation



## Safety hint!

The horizon heart clamp is appointed with plastic coating, for extra protection



## Epoxy resin kit

- With this kit you can connect underground cables. These need to be sealed connections to avoid any interference to the current flow
- Kit consists of 1 x casting compound, 2 x connectors, 1 x pair of work gloves

Part no.

EAN

Piece

15343



Set





## Insulated cable for earth posts

- To connect earth stakes 1m (part no.14041 or earth stakes 1.5m (part no.15017)
- Fence connection by mains adapters in the house
- The cable is double insulated and has a conductor of galvanized steel wire 1.6 mm
- 10m roll

### Double insulated!

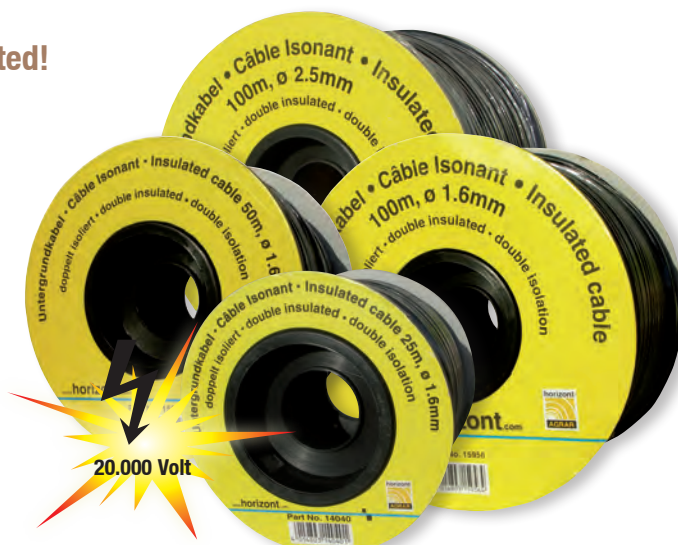
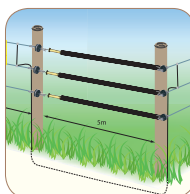


Part no.	EAN	Piece
15321	4 014803 153210	1

## Underground cable and supply cable

- These cables can be used for over earth and under earth fence supply, for connection of earth stakes and gateways
- The voltage strength is approx. 20 000 Volts
- All cables are double insulated and have a conductor made of galvanized steel wire

### Double insulated!



Part no.	length of spool	ø	max. length of fence supply	EAN	Piece
14040	25m	1.6mm	500m	4 014803 140401	1
15525	50m	1.6mm	500m	4 014803 155252	1
15956	100m	1.6mm	500m	4 014803 159564	1
15516	100m	2.5mm	1.000m	4 014803 155160	1

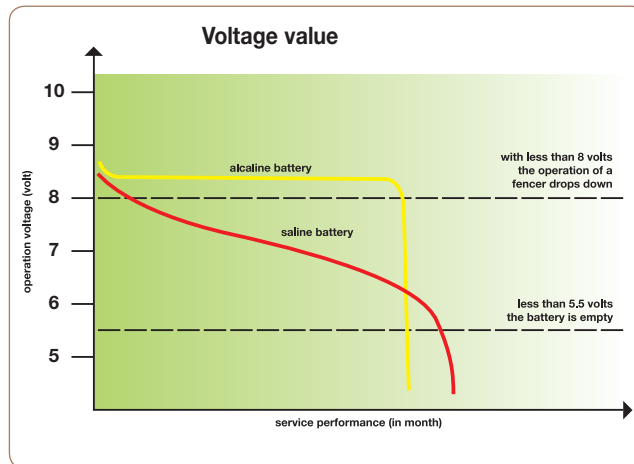
### HINT !

For cable up to ø 1,6mm the insulating tube (part no. 15951, see p. 146) can be used to protect the earth cable, especially when laid into the ground.

Dry batteries for 9 Volt energiser are one-way batteries, which will be disposed of after use. These are the most used batteries, as they can be used without much effort and easily installed. After use please return the empty batteries to your retailer. In connection with the use of a horizon 9 Volt battery energiser and with the horizon power saver control the battery can last up to 2 years, depending on application and use. All of this ensures a high degree of environmental harmony.

### Dry batteries

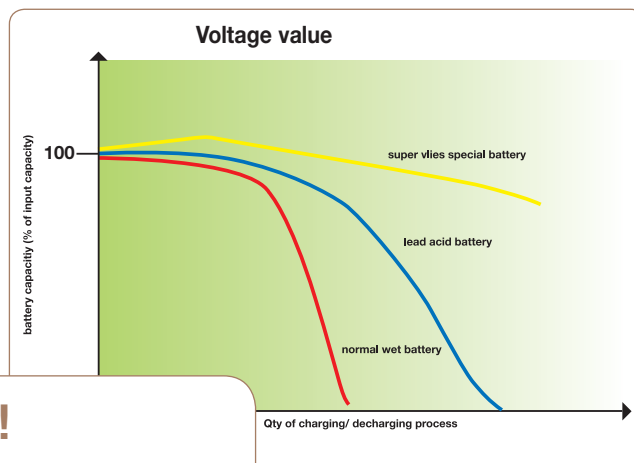
The difference between alkaline and saline dry batteries:



There are 2 different types of dry batteries, the alkaline and saline. Both types are cadmium and mercury free and therefore absolutely environmentally friendly. Particularly interesting is the voltage curve. The alkaline batteries will hold a constant voltage during its whole life time (see yellow curve in the diagram). The voltage of the saline battery is constantly dropping over its life time (see red curve in the diagram). And at a voltage of appx. 5.5 Volts the battery is empty and must be replaced.

### 12 Volt batteries

The difference between 12 Volt Super-Vlies batteries and 12 Volt Lead acid batteries:



Traditional starter-batteries have due to their high discharge a disadvantage. They tolerate considerably less charging – and discharging procedures.

Our Super-Vlies batteries for the 12 Volt energiser and solar installations are maintenance free and work irrespective of its position. They have low self-discharging and very good cycle firmness. Our Special-batteries are dry pre-loaded and need to be filled up with commercial battery acid before use. We recommend to check the acid level appx. every 4 weeks and if so re-fill distilled water.

### Safety hint!

All special 12V batteries should be duly and always fully recharged (see the control display on your energiser).

**Hint!** Stamp sales date on battery top!

### Safety hint!

Before connection to the energiser, make sure to remove the label on the cover of the alkaline battery completely!



## HIGHLIGHT



### Dry batteries 6 / 9 Volt, alkaline „TURBOMAX AB“

- Shows constant output voltage supply
- Cadmium and mercury free
- Can be stored for about 2 years

big housing (B x H x L): 12.5 x 16.0 x 19cm  
small housing (B x H x L): 11.0 x 11.5 x 16.5cm

Part no.	Product	EAN	Piece
14896	TURBOMAX AB200, 9V / 200Ah (big housing)	4 014803 148964	1
12012	TURBOMAX AB170, 9V / 170Ah (big housing)	4 014803 120120	1
120121P	TURBOMAX AB170, 9V / 170Ah (big housing)	4 014803 440617	45
14057	TURBOMAX AB150, 9V / 150Ah (small housing)	4 014803 140579	1
15844	TURBOMAX AB120, 9V / 120Ah (small housing)	4 014803 158444	1
15509	TURBOMAX AB75, 9V / 75Ah (small housing)	4 014803 155092	1
15848	TURBOMAX AB55, 9V / 55Ah (small housing)	4 014803 158482	1
15175B	6V/40Ah (PP8)	4 014803 417596	1

### Hint!

Small and big battery housing fits in all battery energiser. In the housing of the turbostar AB fits two batteries. Alkaline batteries should be used for high power battery energiser, because they ensure a high voltage at the fence.



### Dry batteries 9 Volt, saline „RANGER SB“

- Shows constant output voltage supply
- Cadmium and mercury free

big housing (B x H x L): 12.5 x 16.0 x 19cm  
small housing (B x H x L): 11.0 x 11.5 x 16.5cm

Part no.	Product	EAN	Piece
15535	RANGER SB130, 9V / 130Ah (big housing)	4 014803 155351	1
15004	RANGER SB90, 9V / 90Ah (big housing)	4 014803 150042	1
15034	RANGER SB55, 9V / 55Ah (small housing)	4 014803 150349	1



## Monobloc Battery 6V / 50Ah

- Cadmium and mercury free
- With a high capacity and longer storage life
- For use with energisers hobbygard B and equiSTOP B (see p. 39 – 41)

Part no.	Product	EAN	Piece
230502	Monobloc battery 6V / 50Ah	4 030163 551374	1



## Monobloc batteries 6V / 7Ah

- Cadmium and mercury free
- With high resilience and storage life
- To be used in conjunction with „hobbygard B“, hobbygard AB30 and equiSTOP B as included in the horse kits (see p. 39 – 41)

Part no.	Product	EAN	Piece
253967	6V / 7Ah dry battery	4 030163 537521	1



## 6 Volt alkaline dry battery (round housing)

- Cadmium and mercury free
- Can be stored for about 2 years

Part no.	Product	EAN	Piece
14898	6V / 100Ah	4 014803 148988	1



i



## Important hint to deep discharge!

For energisers a sufficient energy supply is necessary to work without disturbances.

Horizont energisers are equipped with a battery control function that provides the information to the user to change the battery or recharge the battery. If the user ignores this information for a longer time span, the energiser holds up a high voltage at the fence to ensure the security as long as technically possible.

The horiSAMRT AN160 is equipped with a deep discharge shut off, because of the higher energy consumption.

Also the user will also be informed about the energy state of the battery by the battery control LED.

Energiser with a „**deep discharge protection**“ shut off early, before the battery is discharged totally. Because of this the battery should be protected against damage. But this way the maximum time span that is normally left to protect the animals with the energiser will be reduced by shutting off the energiser too early.

**Because of the self discharging of the battery and the energy consumption of the „deep discharge protection“ the deep discharge can't be stopped.** To avoid a deep discharged battery it is important to recharge the battery directly after use or regularly when the battery is not used. Recharge the battery latest after it is discharged by 60% down to 40% of the declared capacity. Recharge the battery never later than discharging it by 80% (20% of the declared capacity is left in the battery) to avoid damage by deep discharging.

The energy consumption of the energiser is given, so it is possible to calculate the possible time to run an energiser. For example: current consumption of a energiser is 180 mA, capacity of the battery: 100Ah →  $100\text{Ah} : 0.18\text{A} = 555.5\text{h} : 24\text{h} = 23\text{ d}$ .

### Lead acid batteries 12 Volt

- Wet battery for battery- and solar installations
- Extremely low self-discharging
- High cycle firmness
- Delivered dry and precharged
- To avoid damage, please recharge these batteries only with a controlled charger, e.g. 14684 and 14863 (see p. 70)



Supply takes place without battery acid !

### Attention!

To prevent damage by deep discharging, never discharge lead acid batteries lower than 11.9 Volts.



Part no.	Product	EAN	Piece
14124	12V / 63(C20)*Ah , without acid	4 014803 141248	1
14894	12V / 85(C100)*Ah, without acid	4 014803 148940	1
14125	12V / 88(C20)*Ah, without acid	4 014803 141255	1
14126	12V / 100(C20)*Ah, without acid	4 014803 141262	1
25012B	Akku 12V / 230(C20)*Ah (20h Charging time), 180Ah (5h Charging time), with acid	4 030163 534582	1
21264	Big lead acid box (800 x 450 x 292mm inside)	4 030163 212640	1

### Battery acid:

Density 1.28 / 37.5% acid sulfur

Part no.	Capacity	Measurement (LxWxH)	Acid
14124	63Ah	246 x 175 x 190mm	3.7 Liter
14894	85Ah	265 x 175 x 225mm	4.37 Liter
14125	88Ah	353 x 175 x 190mm	4.6 Liter
14126	100Ah	353 x 175 x 190mm	4.15 Liter
25012B	230Ah	518 x 276 x 242mm	Contains



14894



Big lead acid box (21264)

Supply is without battery acid (at 25012B)!  
Ask for delivery conditions!

### \* What means C20 and accordingly C100 mean to the capacity details of batteries?

Depending on the strength of the battery discharge, the battery has a higher capacity. C20 shows which capacity the battery has. C20 would discharge over 20 hours until the discharge end pressure. C100 would discharge over 100 hours until the discharge end pressure. To discharge over 20 hours would be more stressful to the battery. This goes to explain the different values on the batteries.

## 12 Volt Super Vlies special battery

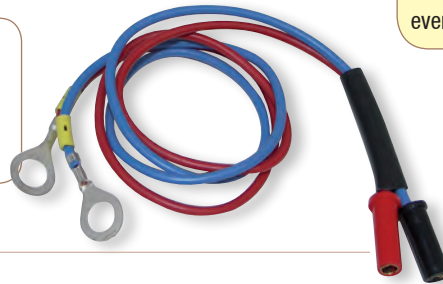
- The ideal, low-maintenance and rechargeable batteries, irrespective of its position
- Type 15842 (=12Ah) and Type 12025 (=27Ah) especially suitable for all battery-driven energisers – complete with 9V connection cable. Accumulators fit in the battery-casing
- Type 15128 (=45Ah) and 14479 (=80Ah) especially suitable for ranger AN3000 and farmer AN1000
- The energiser ranger AN3000, farmer AN1000 and all 9volts battery-driven energisers are with an inbuilt charge regulator.
- To avoid damage please charge your batteries with regulated charging devices, e.g. art. no. 14863 and 14864 (see p. 70)



(Abb. zeigt 12025)

Part no.	Product	Capacity	EAN	Piece
14479 <b>NEW</b>	12V/80Ah	C20*	4 014 803 144799	1
15128	12V/45Ah	C20*	4 014 803 151285	1
12025	12V/27Ah	C20*	4 014 803 120250	1
15842	12V/12Ah	C20*	4 014 803 158420	1
90439C	Connection cable for batteries 15128, 12025, 15842		4 014 803 005786	1

Part no.	Capacity	Measurement (LxWxH)	Acid
14479	80Ah	260 x 170 x 205mm	24.0kg
15128	45Ah	195 x 165 x 175mm	14.8kg
12025	27Ah	175 x 166 x 125mm	8.6kg
15842	12Ah	150 x 98 x 95mm	4.1kg



### Attention!

The self discharging of the horizont Super-Vlies-Batteries is very low. While the battery is not in use, please recharge regularly every two months for example.

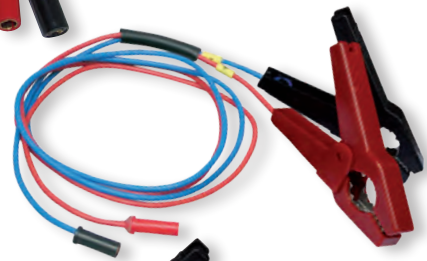
**Connection cable is included in delivery volume of Super-Vlies-Batteries.**

## Connection cables for 12 Volt batteries

- For all 9V energiser that can also be operated with 12V batteries
- Suitable for all horizont energiser pages 18, 23, 29, 33 and 39 and many previous models

**Round connectors:**  
ø 4–6mm, galvanized

Part no.	EAN	Piece
90501C	4 014 803 405852	1



## Connection cables with plug

- For all models of trapper AN fencecontrol

Part no.	EAN	Piece
47BL1.2	5 021 385 005577	1



## Connection terminals, single

**black**

Part no.	EAN	Piece
47PLAS00237	4 014 803 015044	1

**red**

Part no.	EAN	Piece
47PLAS00235	4 014 803 015037	1

## Battery tester

- Tester for measuring the voltage of batteries
- The tester indicates with 10 lamps the voltage of the battery up to 14V

Part no.	EAN	Piece
14672C	4 014 803 146724	1



### 230 Volt mains adapter for older farmer AN15 / 25 energisers and trapper AS energisers

- Mains adapter for the energiser trapper AS and farmer AS70 see p. 30 and 37
- Mains adapter for dual energiser farmer AN15 and farmer AN25 (part no. 10636 and 10637)



Part no.	EAN	Piece
97921UK	4 014803 441737	1

### 230 Volt mains adapter for farmer AN15 / 25 energisers built from 2013 and following years

- Mains adapter for the dual energiser farmer AN15 and farmer AN25 (part. no. 10896 and 10897) see p. 27

Part no.	EAN	Piece
47PSU0008UK	4 014803 007261	1

### 230 Volt mains adapter for farmer trapper AN and ranger AS30

- Mains adapter for the combi energiser trapper AN8, AN12 and AN24, see page 36
- Mains adapter for the dual energiser ranger AS30

Part no.	EAN	Piece
47PSU0009UK	5 021385 008042	1

### 230 Volt mains adapter for ranger AN50 and AN70

- Mains adapter for the combi energiser ranger AN50 and N70, see page 21

Part no.	EAN	Piece
47PSU0010UK	5 021385 008554	1

### 230 Volt mains adapter for ranger AN3000 and farmer AN1000

- Mains adapter for the combi energiser ranger AN3000 and farmer AN1000, see page 24 and 28

Part no.	EAN	Piece
47PSU0008FUK	5 021385 008585	1

### Digital charging unit CHARGE BOX 3.6

- Suitable for all 12V lead acid batteries and 12V super-vlies special batteries from 1.2 up to 120 Ah
- Full automatic and regulated charging
- LED state display
- Protected against dust and splash water
- Pulsecharging / preservation charging / duration charging
- 230V / 50Hz voltage
- Complete with:
  - nylon bag, connection cable with terminal clamps, connection cable with ring connectors, connection cable with terminal for cigarette lighter



#### Charging time:

Part no.	Ah	Charging time (hours)
15842	12Ah	4
12025	26Ah	6.5
15128	45Ah	11
14124	63Ah	14
14863	85Ah	16
14125	88Ah	21
14126	100Ah	23

Part no.	Product	EAN	Piece
14863	Digital charging unit CHARGE BOX 12V / 3.6A	4 014803 148636	1

### Digital charging unit CHARGE BOX 7.0

- Suitable for all 12V lead acid batteries and 12V super-vlies special batteries from 14 up to 230Ah
- Full automatic and regulated charging
- LED state display
- Protected against overheating
- Protected against dust and splash water
- Pulsecharging / preservation charging / duration charging
- 230V/50Hz voltage
- Complete with:
  - nylon bag, connection cable with terminal clamps, connection cable with ring connectors, connection cable with terminal for cigarette lighter



#### Charging time:

Part no.	Ah	Charging time (hours)
12025	26Ah	5
15128	45Ah	6
14124	63Ah	8
14864	85Ah	10
14125	88Ah	11
14126	100Ah	12
25012B	230Ah	29

Part no.	Product	EAN	Piece
14864	Digital charging unit CHARGE BOX 12 / 7.0 / 3.5A	4 014803 148643	1

(Battery and energiser are not included in delivery.)

## 1 Electrifiable metal transport box

- Provides best protection against theft as it can be locked and electrified
- If anybody unauthorized touches the box they will feel a shock and unpleasant power
- Only the owner can open the metal box by using the insulated key and can operate the energiser
- For use with all 12 Volt battery energisers from range horiSMART, farmer, hotSHOCK, equiSTOP and ranger
- Supplied complete with long earth spike (100cms) and 2 keys
- On- and off switch

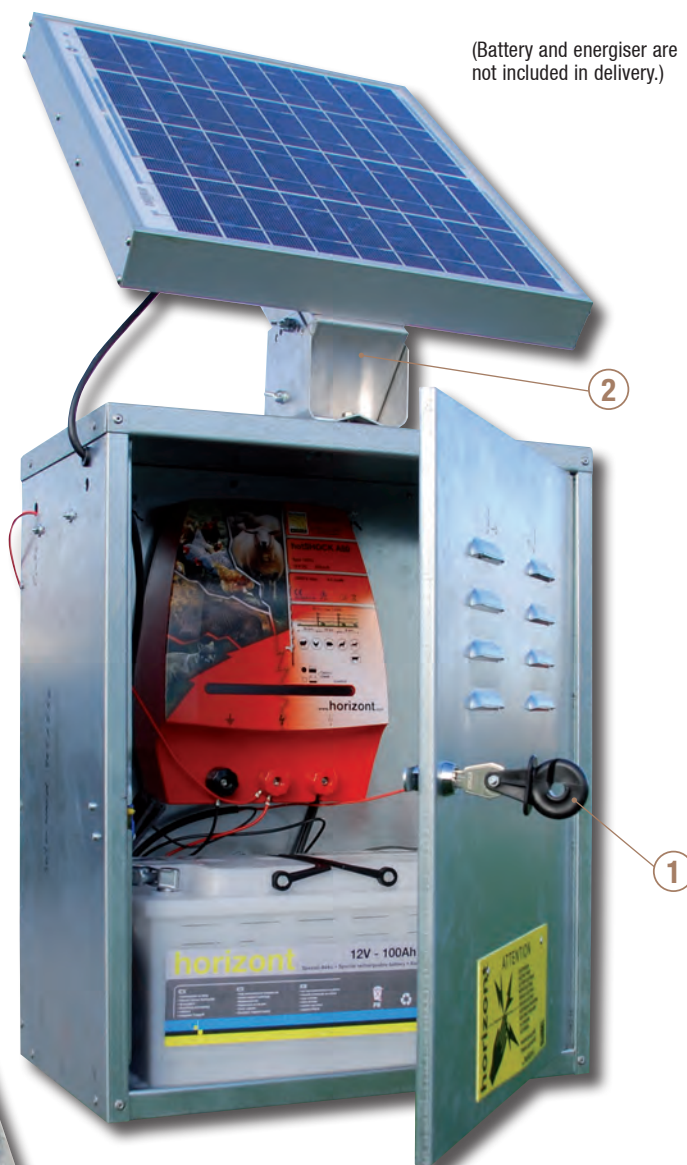
Part no. EAN Piece

14444



1

Dimensions (L x W x H): 273 x 445 x 530mm



## 2 Mounting for solar modules

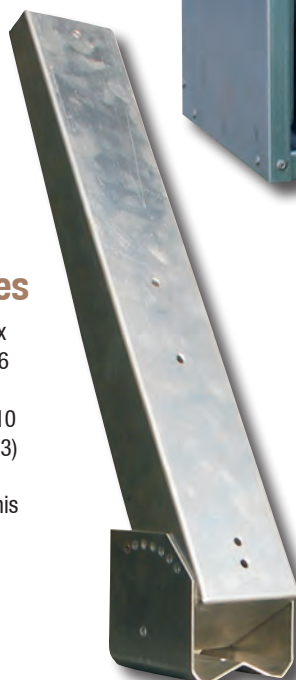
- Mounting for retrofitting to electrifiable transport box 15444 and for the transport boxes 14129 and 15466 (see below)
- Recommended for solar modules 5 Watt (141451), 10 Watt (140631), 20 Watt (140641) and 50 Watt (14873) (see p. 48–50)
- The drift angle of solar modules can be altered on this bracket from 15 up to 75 degrees
- Complete with attachment screws

Part no. EAN Piece

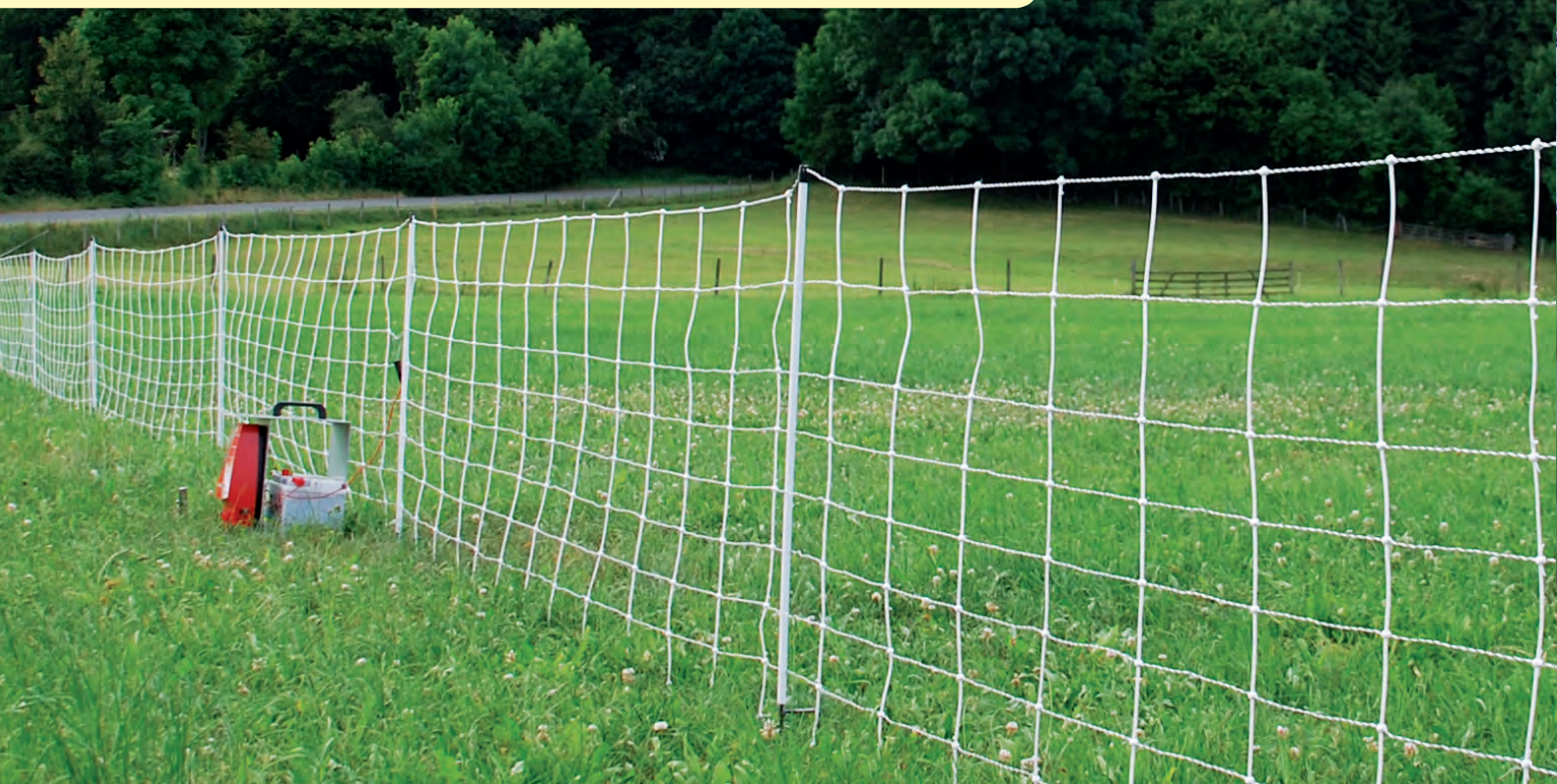
14143



1



insulated key



## Large metal transport box

- Large metal transport box for easy transport of 9V battery and 12V energiser
- With handle
- Metal transport box can be fitted with an attachment fixture for solar panels (see p. 71)
- Ideal for 12V batteries 63Ah and 85Ah



Part no.	Product	EAN	Piece
14129	for models like horiSMART, farmer, ranger and hotSHOCK	4 014803 141293	1
15466	for models like ranger and equiSTOP	4 014803 154668	1

(Battery and energiser are not included in delivery.)

# Fence material and accessories

HIGHLIGHT



**Create connections**  
Do not knot! Connect  
electrical conductive!  
> see p. 94 – 98

A highly visibility of the fence material helps to accept visibility of the fence material helps to accept the fence line as a barrier and supports the animal guarding. A high conductivity ensures a perfect energy transport.

i



HIGHLIGHT



**Super conductive**  
TURBOMAX–tape for a secure  
fencing of your horses.  
> see p.79



HIGHLIGHT



**More security**  
The FENCE BUSTER™ conducts the  
electricity from the outside to the  
inside  
> see p.92–93



HIGHLIGHT



**Durable**  
The permanent fence wire GALVA–  
DUR for your long lasting fence  
> see p.88

## Chapter

## Page

**Fence material** | Product guide  
| overview 73 – 77

**Fence material** | Tapes 78 – 83

**Fence material** | Twines 84 – 86

**Fence material** | Wires 87 – 88

**Fence material** | Ropes 89 – 90

**Fence material** | Horse rug 92 – 93




**Fence material** | Connection  
and tightening 94 – 98

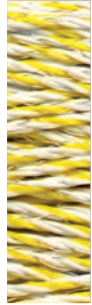















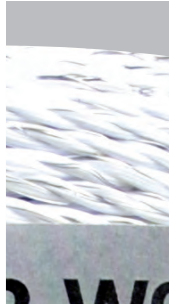
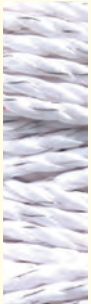
		turbomax T12	turbomax T20	turbomax T40	turbomax W6	turbomax W9	turbomax W12	turbomax R6-PE	turbomax R7-PE
									
Page		79			84			89	
Width / ø		12mm	20mm	40mm				ø 6mm	ø 7mm
Spool		200m			200m 400m 1000m	200m 400m 1000m	200m 400m 1000m	200m 400m 800m	200m 400m
Conductors		6	8	12	6	9	12	6	6
Stainless steel		0.20mm							
Copper									
		0.30mm	0.25mm	0.25mm	0.30mm	0.25mm	0.25mm	0.25mm	
									
Resistance		0.14 Ω/m	0.15 Ω/m	0.09 Ω/m	0.12 Ω/m	0.11 Ω/m	0.08 Ω/m	0.17 Ω/m	0.17 Ω/m
High breaking strength		~60kg	~140kg	~240kg	~180kg	~200kg	~220kg	~500kg	~600kg
Max rec. fence length	Mains– / Accumulator energiser	17 000m	16 500m	23 000m	18 500m	19 000m	23 500m	16 000m	16 000m
	Battery ener– giser	5 600m	5 500m	7 700m	6 100m	6 300m	8 000m	5 300m	5 300m
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					●				
		●						●	

● Best for these animals !

● Good for these animals !

RANGER T12	RANGER T20	RANGER T40	RANGER W3-O
			
80			
12mm	20mm	40mm	
200m			200m 400m 1000m
4	5	8	
0.22mm			
0.33 Ω/m	0.27 Ω/m	0.2 Ω/m	
~60kg	~120kg	~180kg	
13 000m	13 500m	14 500m	
4 300m	4 500m	4 800m	
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RANGER W3-W		RANGER FLUO W3	RANGER R6	RANGER FLUO R6	RANGER FLEX W3	RANGER FLEX W4
						
85			90		90	
			ø 5–6mm	ø 5–6mm	ø 3mm	
200m 400m 1000m		200m 400m	200m 400m	200m	300m 500m	200m 500m
3			6		3	4
					0.16mm	
					0.20mm	
0.5mm			0.22mm			
0.35 Ω/m			0.22 Ω/m		0.59 Ω/m	0.55 Ω/m
~160kg			~350kg		~40kg	~110kg
12 000m			14 000m		10 000m	10 500m
4 000m			4 600m		3 300m	3 300m
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FARMER T10	FARMER T20	FARMER T40	FARMER W3	FARMER W6	FARMER W9	FARMER R6
 	  	 	 			
81			86			91
10mm	20mm	40mm				ø 6mm
200m 2 x 200m	200m 2 x 200m	200m	250m	250m 400m	250m 400m	200m 400m
3	4	8	3	6	9	6
0.15mm			0.18mm			0.20mm
14.4 Ω/m	10.8 Ω/m	5.4 Ω/m	9.99 Ω/m	4.98 Ω/m	3.33 Ω/m	4.05 Ω/m
~40kg	~90kg	~120kg	50kg	~60kg	~70kg	~250kg
1 800m	2 500m	3 300m	3 000m	3 500m	4 500m	4 000m
500m	800m	1 100m	900m	1 100m	1 500m	1 300m
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	trapper®		GREEN power-line					HOBBYGARD / EQUISTOP			
	TRAPPER W3		GREEN-POWER T12	GREEN-POWER T20	GREEN-POWER T40	GREEN-POWER W3	GREEN-POWER R6	HOBBYGARD T8	EQUISTOP T20	EQUISTOP T30	EQUISTOP T40
											
Page	86		82			86	91	82	83		
Width / ø			12mm	20mm	40mm		ø 5–6mm	8mm	20mm	30mm	40mm
Spool	250m 500m		200m			200m	200m	100m	200m		
Conductors	3		3	5	8	3	6	3	4	6	8
Stainless steel	0.15mm										
Copper											
HIGH TENSILE											
											
			0.25mm	0.22mm	0.20mm	0.25mm	0.22mm	0.25mm	0.22mm	0.22mm	0.20mm
Resistance	14.4 Ω/m		0.35 Ω/m	0.27 Ω/m	0.2 Ω/m	0.35 Ω/m	0.22 Ω/m	0.35 Ω/m	0.33 Ω/m	0.22 Ω/m	0.2 Ω/m
High breaking strength	~30kg		~60kg	~120kg	~180kg	~160kg	~350kg	~30kg	~150kg	~220kg	~260kg
Max rec. fence length	Mains- / Battery energiser	1 800m	12 000m	13 500m	14 500m	12 000m	14 000m	12 000m	13 000m	14 000m	14 500m
	Battery energiser	500m	4 000m	4 500m	4 800m	4 000m	4 600m	4 000m	4 300m	4 600m	4 800m
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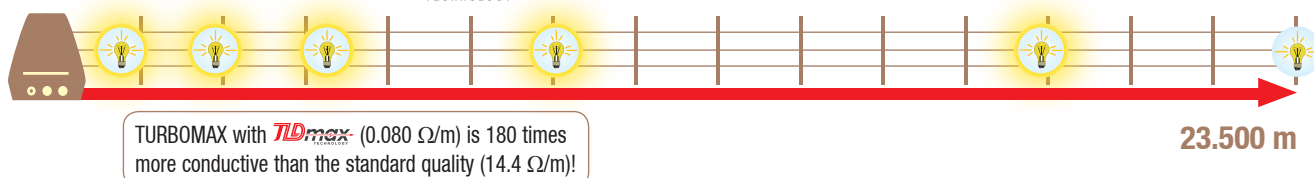
● Best for these animals !

● Good for these animals !

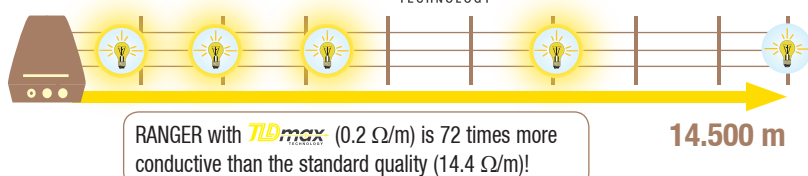
			WIRE								
EQUIWIRE	HAPPY NT2.0		HAPPY NT4.0		DEDERONTWINE	HORITWINE	RANGER TWIST	GALVADUR		STEEL WIRE	STRANDED STEEL WIRE
											
87	83		87		87	88		88		88	
	20mm	40mm									
400m	200m		500m 1000m	1000m	200m	625m	315m	250m	200m 400m		
3	4	8	2		1	1	1	1	7		
			0.5mm		0.5mm	2.5mm	1.6mm	1.8mm	0.5mm		
1											
	0.22mm	0.20mm									
0,04 Ω/m	0.33 Ω/m	0.2 Ω/m	0.35 Ω/m		0.7 Ω/m	0.04 Ω/m	0.06 Ω/m	0.05 Ω/m	0.12 Ω/m		
~500kg	~130kg	~180kg	~30kg		~	~500kg	~200kg	~500kg	~200kg		
30 000m	13 000m	14 500m	12 000m		6 000m	30 000m	26 000m	28 000m	18 500m		
11 000m	4 300m	4 800m	4 000m		2 000m	11 000m	8 700m	9 400m	6 100m		
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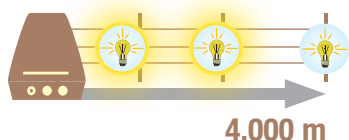
## TURBOMAX **TLDmax** TECHNOLOGY



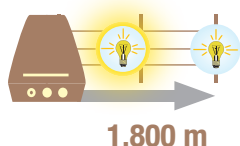
## RANGER **TLDmax** TECHNOLOGY



## FARMER



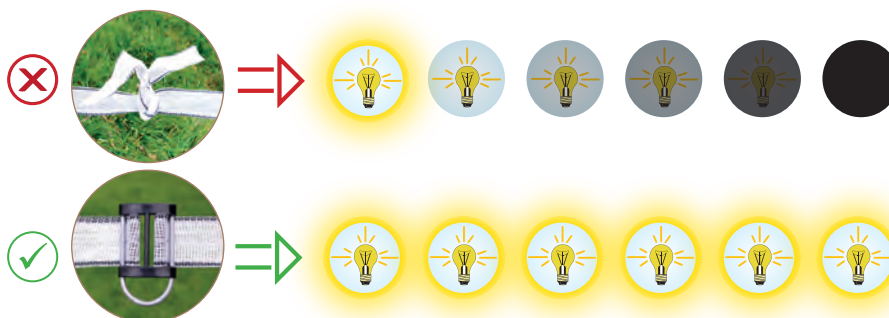
## TRAPPER



- Excellent conductivity is achieved with the new designed conductors of **TLDmax**
- High performance will also be reached on long fences, because of the high conductivity
- The conductivity of the conductors of the **TLDmax** is much higher than the standard quality
- The **TLDmax**—conductors are extremely weather resistant
- High breaking loads are reached with high—quality plastic monofilaments

## Never knot your tape!

- Connection and access material guarantee a non—disturbed energy flow
- Knots and other bad conductor connections or — accesses disturb the energy flow
- The conductor material at multistranded fences is connected at regular distances





## for maximum current flow



The bridge conductors allow a permanent current flow even with conductor breakage

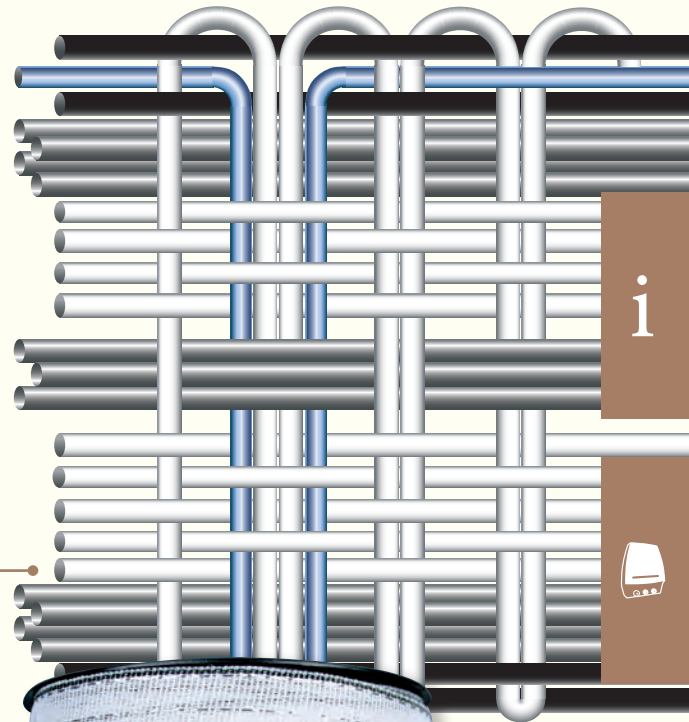


Turbomax ( $0.09\Omega/\text{m}$ ) is 160 times more conductive than the standard quality ( $14.4\Omega/\text{m}$ )!

Grouped **TLDmax** – conductors for best conductivity and highest breaking strength



Polyethylene monofilaments ensures long-levity



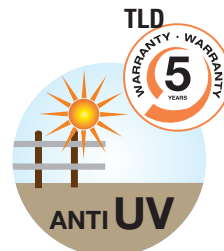
HIGHLIGHT  
★★★★★

## TURBOMAX

- Excellent conductivity is achieved with the newly designed conductors of **TLDmax**
- High performance is also reached on long fences, because of the high conductivity
- The conductivity of the conductors of the **TLDmax** is much higher than the standard quality
- **TLDmax** – conductors are extremely weather resistance
- High breaking loads are reached with high-quality plastic monofilaments
- 5 years warranty for UV stability



Part no.	Product	Width	Colour	Spool	EAN	Piece
17110	TURBOMAX T12	12mm	black/white/black	200m	4 014803 171108	1
17111	TURBOMAX T20	20mm	black/white/black	200m	4 014803 171115	1
17112	TURBOMAX T40	40mm	black/white/black	200m	4 014803 171122	1



	Width	Spool	Conduc-tors	Diameter stainless steel	<b>TLDmax</b>	Resistance		Max rec. fence length		
								main energiser	dry battery energiser*	
17110	12mm	200m	6	0.20mm	0.3mm	$0.14\Omega/\text{m}$	~60kg	17 000m	5 600m	18
17111	20mm	200m	8	0.20mm	0.25mm	$0.15\Omega/\text{m}$	~140kg	16 500m	5 500m	8
17112	40mm	200m	12	0.20mm	0.25mm	$0.09\Omega/\text{m}$	~240kg	23 000m	7 700m	3

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

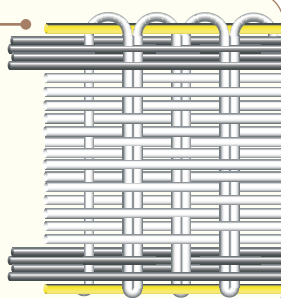
## Fence material and accessories

### Tapes

With yellow outer edges for better visibility

Grouped **TLDmax**—conductors for best conductivity and highest breaking strength

Up to 72 times ( $0.2 \Omega/\text{m}$ ) more conductive than the standard quality ( $14.4 \Omega/\text{m}$ )



## RANGER **TLDmax** TECHNOLOGY

- The high number of **TLDmax** conductors in all Ranger—tapes ensure a good conduct
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- White tape with yellow outer edges

PE



TLD

TLD

TLD

TLD

Part no.	Product	Width	Colour	Spool	EAN	Piece
17113	RANGER T12-W	12mm	yellow/white/yellow	200m	4 014803 171139	1
17114	RANGER T20-W	20mm	yellow/white/yellow	200m	4 014803 171146	1
17115	RANGER T40-W	40mm	yellow/white/yellow	200m	4 014803 171153	1
17117	RANGER T12-O	12mm	yellow/orange/yellow	200m	4 014803 171177	1



## HIGHLIGHT



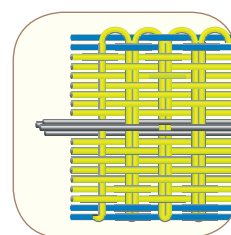
## RANGER FLUO **TLDmax** TECHNOLOGY

- The tape Ranger Fluo is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woods
- High number of **TLDmax** conductors for best conductivity
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty

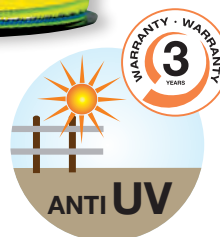
PE



TLD



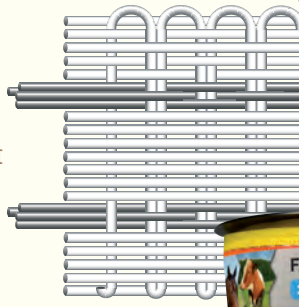
Part no.	Product	Width	Colour	Spool	EAN	Piece
17116	RANGER FLUO T12	12mm	fluorescent acting	200m	4 014803 171160	1



	Width	Spool	Conduc-tors	Diameter stainless steel	<b>TLDmax</b> TECHNOLOGY	Resistance		Max rec. fence length		
								main energiser	dry battery energiser*	
17113	12mm	200m	4	—	0.22mm	$0.33\Omega/\text{m}$	~60kg	13 000m	4 300m	18
17114	20mm	200m	5	—	0.22mm	$0.27\Omega/\text{m}$	~120kg	13 500m	4 500m	8
17115	40mm	200m	8	—	0.20mm	$0.2\Omega/\text{m}$	~180kg	14 500m	4 800m	8
17117	12mm	200m	4	—	0.22mm	$0.33\Omega/\text{m}$	~60kg	13 000m	4 300m	18
17116	12mm	200m	4	—	0.22mm	$0.33\Omega/\text{m}$	~60kg	13 000m	4 300m	18

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

Grouped stainless steel conductors for best conductivity and highest breaking strength



### FARMER

- These standard tapes are suitable for short fences and paddocks
- High breaking strength
- Monofilaments with a high UV-stability
- Colour: white, yellow/orange or green.

PE



Part no.	Product	Width	Colour	Spool	EAN	Piece
17451	FARMER T10-W	10mm	white	200m	4014803174512	1
17287	FARMER T10-O	10mm	yellow/orange	200m	4014803172877	1
17475	FARMER T20-W	20mm	white	200m	4014803174758	1
17475GR	FARMER T20-G	20mm	green	200m	4014803428806	1
17528	FARMER T20-O	20mm	yellow/orange	200m	4014803175281	1
17458	FARMER T40-W	40mm	white	200m	4014803174581	1
17458GR	FARMER T40-G	40mm	green	200m	4014803428813	1



### FARMER in double packs

Part no.	Product	Width	Colour	Spool	EAN	Piece
17271	FARMER T10-W	10mm	white	2 x 200m	4014803172716	1
17272	FARMER T20-W	20mm	white	2 x 200m	4014803172723	1
17273	FARMER T10-O	10mm	yellow/orange	2 x 200m	4014803172730	1
17274	FARMER T20-G	20mm	yellow/orange	2 x 200m	4014803172747	1

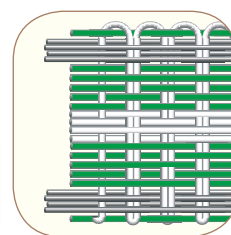


Part no.	Width	Spool	Con- ductors	Diametre stainless steel	Resistance		Max rec. fence length		
							main fences / 12V*	dry battey fences*	
17451	10mm	200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	18
17287	10mm	200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	18
17475	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17475GR	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17528	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17458	40mm	200m	8	0.15mm	5.4Ω/m	~120kg	3300m	1100m	8
17458GR	40mm	200m	8	0.15mm	5.4Ω/m	~120kg	3300m	1100m	8
17271	10mm	2 x 200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	16
17272	20mm	2 x 200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	8
17273	10mm	2 x 200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	16
17274	20mm	2 x 200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	8

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

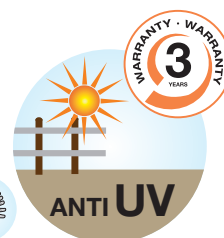
### GREEN power-line **TLDmax** TECHNOLOGY

- The tapes of the Green power-line are especially practical for long fences, because of the **TLDmax** conductors
- Because of the green colour, the tape fits perfectly to the landscape
- Good visibility because of the white identification strand
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Width	Colour	Spool	EAN	Piece
17118	GREEN-POWER T12	12mm	green	200m	4 014803 171184	1
17119	GREEN-POWER T20	20mm	green	200m	4 014803 171191	1
17120	GREEN-POWER T40	40mm	green	200m	4 014803 171207	1

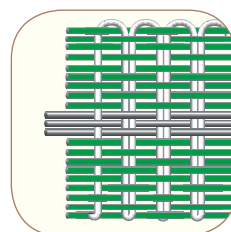
PE



### HIGHLIGHT ★★★★★

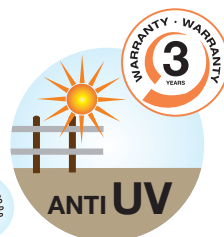
### HOBBYGARD T8 **TLDmax** TECHNOLOGY

- The tapes of the HOBBYGARD T8-line are especially practical for long fences, because of the **TLDmax** conductors
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Green with white identification strand



Part no.	Product	Width	Colour	Spool	EAN	Piece
17126	HOBBYGARD T8	8mm	green	100m	4 014803 171269	1

PE

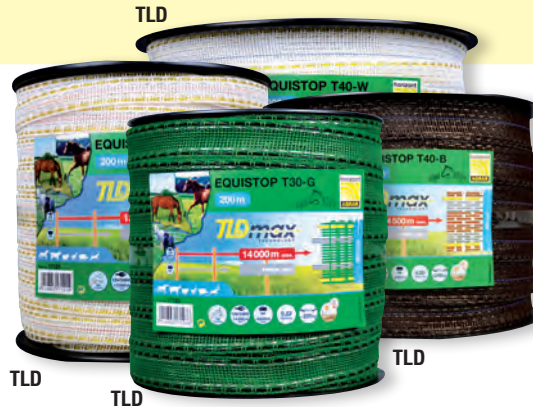


Part no.	Width	Spool	Conduc-tors	<b>TLDmax</b> TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
17118	12mm	200m	3	0.25mm	0.35Ω/m	~60kg	12 000m	4 000m	18
17119	20mm	200m	5	0.22mm	0.27Ω/m	~120kg	13 500m	4 500m	15
17120	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	8
17126	8mm	100m	3	0.25mm	0.35Ω/m	~30kg	12 000m	4 000m	42

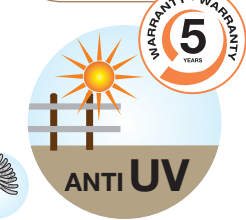
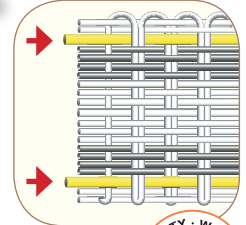
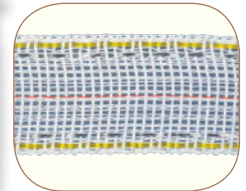
\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

### EQUISTOP **TLDmax** TECHNOLOGY

- The tapes of the Equistop-line are especially practical for long fences, because of the **TLDmax** conductors
- High tensile load is possible because of strengthened outer edges
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Colours white, brown and green



**Strengthened monofilament edges 1.4mm Polyamid !**

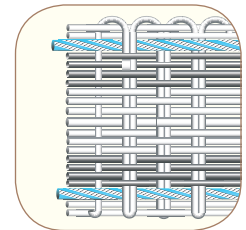


Part no.	Product	Width	Colour	Spool	EAN	Piece
17121	EQUISTOP T20-W	20mm	white	200m	4 014803 171214	1
17122	EQUISTOP T20-B	20mm	brown	200m	4 014803 171221	1
17123	EQUISTOP T30-G	30mm	green	200m	4 014803 171238	1
17124	EQUISTOP T40-W	40mm	white	200m	4 014803 171245	1
17125	EQUISTOP T40-B	40mm	brown	200m	4 014803 171252	1



### Happy **TLDmax** TECHNOLOGY

- The happy-tapes are available in widths of 20mm and 40mm
- Highly visible coloured edges



Part no.	Product	Width	Colour	Spool	EAN	Piece
17136HG	Happy NT2.0	20mm	lime/white/lime	200m	4 014803 444677	1
17136LI	Happy NT2.0	20mm	purple/white/purple	200m	4 014803 444684	1
17136TU	Happy NT2.0	20mm	turquoise/white/turquoise	200m	4 014803 444691	1
17137HG	Happy NT4.0	40mm	lime/white/lime	200m	4 014803 444707	1
17137LI	Happy NT4.0	40mm	purple/white/purple	200m	4 014803 444714	1
17137TU	Happy NT4.0	40mm	turquoise/white/turquoise	200m	4 014803 444721	1



Part no.	Width	Spool	Conduc-tors	<b>TLDmax</b> TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
17121	20mm	200m	4	0.22mm	0.33Ω/m	~150kg	13 000m	4 300m	8
17122	20mm	200m	4	0.22mm	0.33Ω/m	~150kg	13 000m	4 300m	8
17123	30mm	200m	6	0.22mm	0.22Ω/m	~220kg	14 000m	4 600m	6
17124	40mm	200m	8	0.20mm	0.2Ω/m	~260kg	14 500m	4 800m	4
17125	40mm	200m	8	0.20mm	0.2Ω/m	~260kg	14 500m	4 800m	4
17136HG	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17136LI	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17136TU	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17137HG	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4
17137LI	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4
17126TU	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

## Fence material and accessories

### Twines



Turbomax (0.080Ω/m) is 180 times more conductive than the standard quality (14.4Ω/m)!



**TLDmax** conductors for best conductivity and highest breaking strength



Monofilaments with highest UV protection



### TURBOMAX

- The high number of **TLDmax** conductors in all TURBOMAX twines
- The high number **TLDmax** conductors ensure a high energy flow and high conductivity
- Polyethylene monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 5 years warranty for UV stability



# TLD!

Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
17140	TURBOMAX W6	6	white/black/white	200m	4 014803 171405	1
17140-400	TURBOMAX W6	6	white/black/white	400m	4 014803 437891	1
17140-1000	TURBOMAX W6	6	white/black/white	1000m	4 014803 437907	1
17141	TURBOMAX W9	9	white/black/white	200m	4 014803 171412	1
17141-400	TURBOMAX W9	9	white/black/white	400m	4 014803 437914	1
17141-1000	TURBOMAX W9	9	white/black/white	1000m	4 014803 437921	1
17142	TURBOMAX W12	12	white/black/white	200m	4 014803 171429	1
17142-400	TURBOMAX W12	12	white/black/white	400m	4 014803 437938	1
17142-1000	TURBOMAX W12	12	white/black/white	1000m	4 014803 437945	1



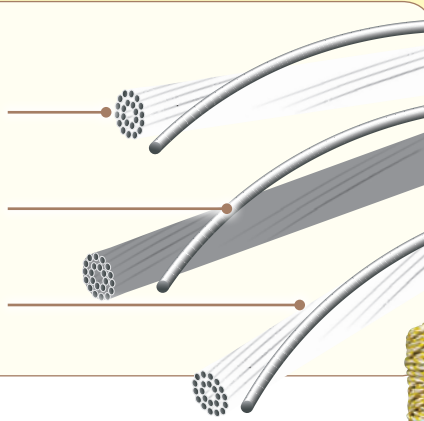
Part no.	Spool	Conduc- tors	Resistance			Max rec. fence length		
						main fences	dry battery fences*	
17140	200m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	18
17140-400	400m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	8
17140-1000	1 000m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	4
17141	200m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	18
17141-400	400m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	8
17141-1000	1 000m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	4
17142	200m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	18
17142-400	400m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	8
17142-1000	1 000m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	4

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

Up to 42 times more conductive  
(0.35  $\Omega$ /m) than the standard quality  
(14.4  $\Omega$ /m)

Grouped **TLDmax** conductors for  
best conductivity

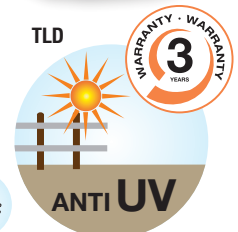
UV stabilized polyethylene  
monofilaments for best resistance



## RANGER TLDmax

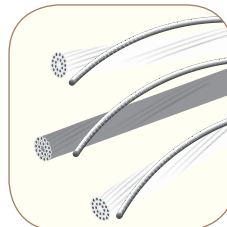
- The high number of **TLDmax** conductors in all RANGER twines ensure a good conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow and a high conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty

Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17143	RANGER W3-O	3	orange/grey/orange	200m	4 014803 171436	1
17143-400	RANGER W3-O	3	orange/grey/orange	400m	4 014803 437952	1
17143-1000	RANGER W3-O	3	orange/grey/orange	1000m	4 014803 437969	1
17144	RANGER W3-W	3	orange/grey/orange	200m	4 014803 171443	1
17144-400	RANGER W3-W	3	orange/grey/orange	400m	4 014803 437976	1
17144-1000	RANGER W3-W	3	orange/grey/orange	1000m	4 014803 437983	1



## RANGER FLUO TLDmax

- The tape Ranger Fluo is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woods
- High number of **TLDmax** conductors for best conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17145	RANGER FLUO W3	3	fluorescent acting	200m	4 014803 171450	1
17145-400	RANGER FLUO W3	3	fluorescent acting	400m	4 014803 438058	1



Part no.	Spool	Conductors:	Resistance		Max rec. fence length			
					main fences	dry battery fences*		
17143	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17143-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18
17143-1000	1 000m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	4
17144	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17144-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18
17144-1000	1 000m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	4
17145	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17145-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18

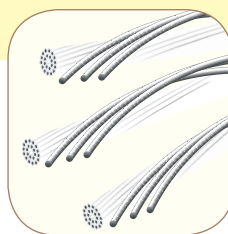
\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

# Fence material and accessories

## Twines

### FARMER

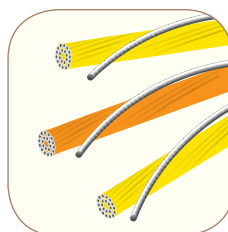
- Polywire standard qualities for short and medium sized fence lengths with increased number of strong monofilaments for higher breaking strength
- More special features are:
  - Twice as many monofilaments as a standard quality.
  - Monofilaments with highest UV protection
  - Best breaking strength
- Colour: white and yellow/orange/yellow



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
15346	FARMER W3-W	3	white	250m	4 014803 153463	1
15282	FARMER W6-W	6	white	250m	4 014803 152824	1
15283	FARMER W6-W	6	white	400m	4 014803 152831	1
15347	FARMER W9-W	9	white	250m	4 014803 153470	1
15277	FARMER W9-W	9	white	400m	4 014803 152770	1
15345	FARMER W3-O	3	yellow/orange/yellow	250m	4 014803 153456	1

### TRAPPER

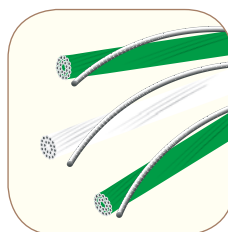
- For short fences only
- Colour: yellow/orange/yellow



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
15567	TRAPPER W3	3	yellow/orange/yellow	250m	4 014803 155672	1
15849	TRAPPER W3	3	yellow/orange/yellow	500m	4 014803 158499	1

### GREEN power-line TLDmax

- The twines of the Green power-line are especially practical for long fences, because of the TLDmax conductors
- Because of the green colour, the twine fits perfectly to the landscape
- Very visible because of the white identification strand
- Grouped TLDmax conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
17146	GREEN POWER W3	3	green	200m	4 014803 171467	1

Part no.	Spool	Con- ductors	Diametre stainless steel	TLDmax Technology	Resistance		Max rec. fence length		
							main fencers / 12V*	dry battey fencers*	
15345	250m	3	0.18mm	—	9.99Ω/m	~50kg	3000m	900m	32
15346	250m	3	0.18mm	—	9.99Ω/m	~50kg	3000m	900m	32
15282	250m	6	0.18mm	—	4.98Ω/m	~60kg	3500m	1 100m	32
15283	400m	6	0.18mm	—	4.98Ω/m	~60kg	3500m	1 100m	18
15347	250m	9	0.18mm	—	3.33Ω/m	~70kg	4500m	1 500m	20
15277	400m	9	0.18mm	—	3.33Ω/m	~70kg	4500m	1 500m	18
15567	250m	3	0.15mm	—	14.4Ω/m	~30kg	1800m	500m	50
15849	500m	3	0.15mm	—	14.4Ω/m	~30kg	1800m	500m	24
17146	200m	3	—	0.25mm	0.35Ω/m	~160kg	12 000m	4 000m	32

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

## Dederon wire „Original Steuer“

- Plastic core 1.4 mm diameter.
- Entwined with 2 special conductors.
- Galvanized metal wire.

1000m

Part no.	EAN	Piece
15833S	4 014803 426420	1

500m

Part no.	EAN	Piece
15531S	4 014803 426413	1



## Horilitze horizont quality

- Plastic core 1.4 mm diameter.
- Entwined with 2 special conductors.
- Galvanized metal wire.

1000m

Part no.	EAN	Piece
15833	4 014803 158338	1



## RANGER TWIST

- Plastic core out of 24 plastic monofilaments
- Wrapped with a special conductor
- Made of galvanized steel wire

Part no.	EAN	Piece
14986	4 014803 149862	1



## EQUIWIRE

- Galvanized steel wire with a diameter of 2.5mm
- UV-protected polyethylene casing
- Protects the galvanized steel wire inside against weather impact
- Protects your animal by contact with the fence
- The electrically conducting plastic surrounds the inside steel wire. The impulse energy of the steel wire is conducted to the surface area of the EQUIWIRE

- Good visibility
- Easy installation
- High performance



Part no.	Product	Con- ductors	Spool	EAN	Piece
14900	EQUIWIRE	1	400m	4 014803 149008	1

Part no.	Spool	Conduc- tors	HIGH TENSILE	Diametre stainless steel	Resistance		Max rec. fence length		
							main fences	main fences	
15833	1000m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
15833S	1000m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
15531S	500m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
14986	20m	1		0,5mm	0,7Ω/m	~30kg	6 000m	2 000m	1
14900	400m	3	1	—	0,04Ω/m	~500kg	30 000m	11 000m	1

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

### HIGHLIGHT



## High tensile wire GALVADUR

- Special wire with a thick galvanized zinc/aluminum long time protection (95% zinc and 5% aluminium)
- High tensile wire has four times longer life compared to normal steel wires



### GALVADUR 2.5, 625m (= 25kg), 2.5mm ø

Part no.	EAN	Piece
15945	4 014803 159458	1

### GALVADUR 1.6, 315m (= 5kg), 1.6mm ø

Part no.	EAN	Piece
15904	4 014803 159045	1

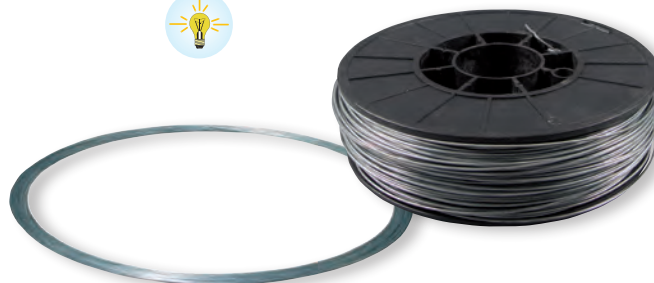


## Steel wire

- Galvanized
- 1.8mm ø



Part no.	EAN	Piece
15036	4 014803 150363	1
15036S	4 014803 436689	1



## Stranded steel wire

- Galvanized
- 1.5mm ø



### Ring 200m

Part no.	EAN	Piece
15009	4 014803 150097	1

### Spool, 200m

Part no.	EAN	Piece
14134	4 014803 141347	1

### Spool, 400m

Part no.	EAN	Piece
14134-400	4 014803 438102	1



Part no.	Spool	Con- ductors	Diametre stainless steel	Resistance		Max rec. fence length		
						main fences / 12V*	dry battey fences*	
15945	625m	1	2,5mm	0,04Ω/m	~500kg	30 000m	11 000m	1
15904	315m	1	1,6mm	0,06Ω/m	~200kg	26 000m	8 700m	1
15036	250m	1	1,8mm	0,05Ω/m	~500kg	28 000m	9 400m	5
15036S	250m	1	1,8mm	0,05Ω/m	~500kg	28 000m	9 400m	5
15009	200m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1
14134	200m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1
14134-400	400m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



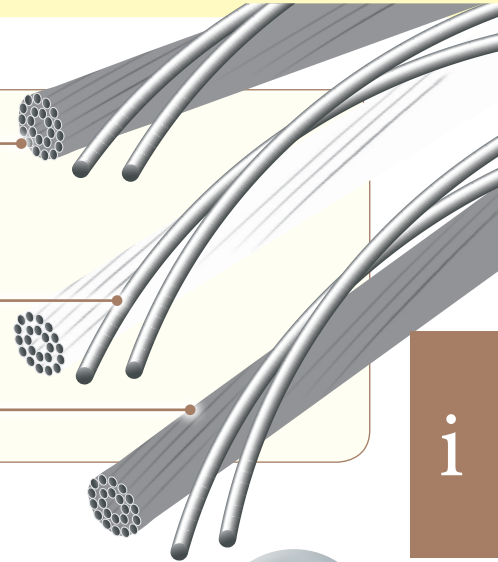
Up to 84 times more conductive  
( $0.17\Omega/\text{m}$ ) than the standard quality  
( $14.4\Omega/\text{m}$ )!



Grouped **TLDmax** conductors for best  
conductivity and highest breaking strength



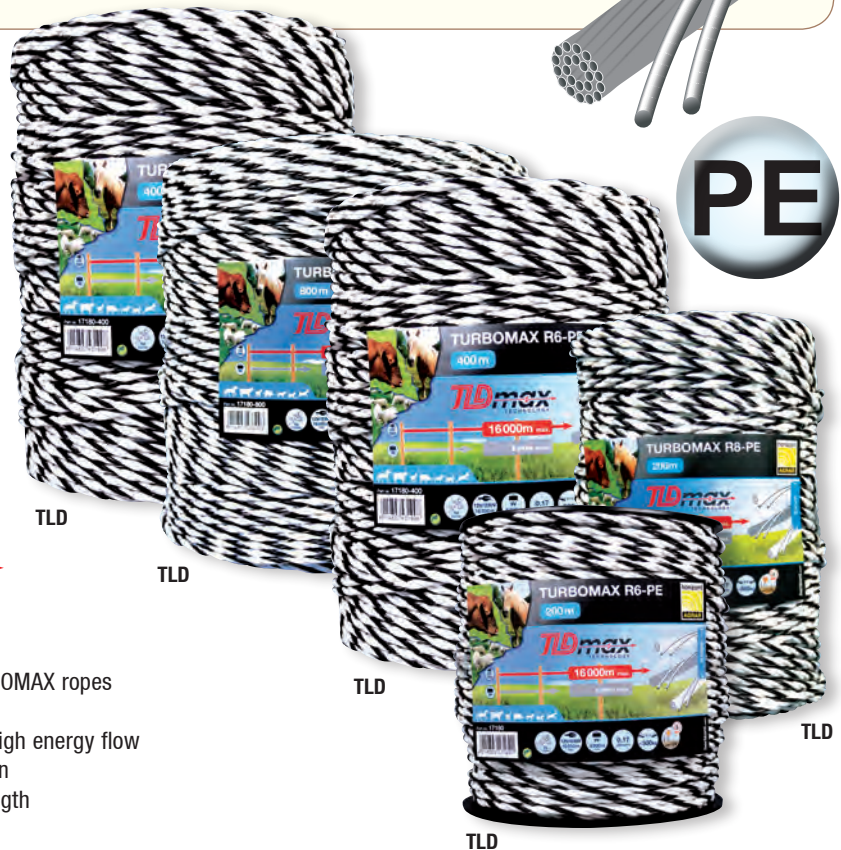
UV stabilized polyethylene  
filaments for best resistance



PE

**TLDmax**  
TURBOMAX TECHNOLOGY

- The high number of **TLDmax** conductors in all TURBOMAX ropes ensure a high conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow
- Polyethylene monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 5 years warranty
- Colour: white with black identification strand





Part no.	Product	Ø	Spool	EAN	Piece
17180	TURBOMAX R6-PE	6mm	200m	4014803471801	1
17180-400	TURBOMAX R6-PE	6mm	400m	4014803431998	1
17180-800	TURBOMAX R6-PE	6mm	800m	4014803438003	1
17181	TURBOMAX R7-PE	7mm	200m	4014803471818	1
17181-400	TURBOMAX R7-PE	7mm	400m	4014803438287	1



PE



Part no.	Spool	Conduc- tors	Resistance		Max rec. fence length			
					main fencers	dry battery fencers*		
17180	200m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	8
17180-400	400m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	3
17180-800	800m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	1
17181	200m	6	0.25mm	0.17Ω/m	~600kg	16 000m	5 300m	8
17181-400	400m	6	0.25mm	0.17Ω/m	~600kg	16 000m	5 300m	3

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

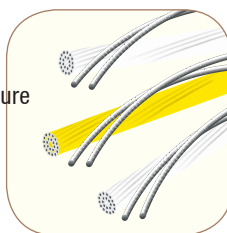


## Fence material and accessories

### Ropes

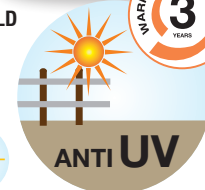
#### RANGER TLDmax TECHNOLOGY

- The high number of **TLDmax** conductors in all TURBOMAX ropes ensure a high conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Colour: white with yellow identification strand



TLD

TLD



Part no.	Product	ø	Spool	EAN	Piece
17182	RANGER R6	5–6mm	200m	4 014803 171825	1
17182-400	RANGER R6	5–6mm	400m	4 014803 438010	1

#### RANGER FLUO TLDmax TECHNOLOGY

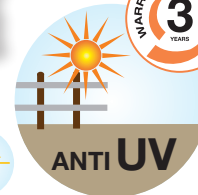
- The rope RANGER FLUO is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woods
- High number of **TLDmax** conductors for safety and highest conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



TLD



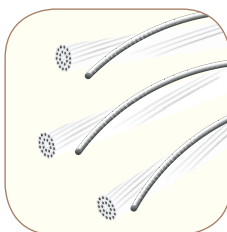
PE



Part no.	Product	Conductors	Colour	ø	Spool	EAN	Piece
17184	RANGER FLUO R6	6	fluorescent	6mm	200m	4 014803 171849	1

#### RANGER FLEX W3 and W4

- The electrical rope with braided monofilaments
- RANGER FLEX W3 monofilaments are braided in a 3mm skin, RANGER FLEX W4 in a 4mm skin
- The rope has much more elasticity than other ropes
- With stainless steel for highest breaking strength and tinned copper for best conductivity

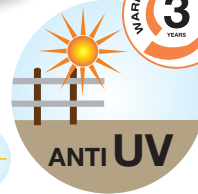


TLD

TLD



PE



Part no.	Product	ø	Spool	EAN	Piece
14395	RANGER FLEX W3	3mm	300m	4 014803 143952	1
14396	RANGER FLEX W3	3mm	500m	4 014803 143969	1
14157	RANGER FLEX W4	4mm	200m	4 014803 141576	1
14158	RANGER FLEX W4	4mm	500m	4 014803 141583	1

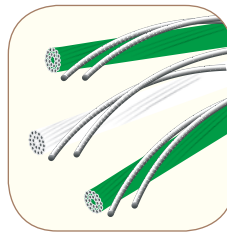
Part no.	Spool	Conductors	Diameter stainless steel	Tinned copper	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
								main fences	dry battery fences*:	
17182	200m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	8
17182-400	400m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	3
14184	200m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	8
14395	300m	3	0.16mm	0.20mm	–	0.59Ω/m	~40kg	10 000m	3 300m	16
14396	500m	3	0.16mm	0.20mm	–	0.59Ω/m	~40kg	10 000m	3 300m	10
14157	200m	4	0.16mm	0.20mm	–	0.55Ω/m	~110kg	10 500m	3 500m	10
14158	500m	4	0.16mm	0.20mm	–	0.55Ω/m	~110kg	10 500m	3 500m	6

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



## GREEN power-line R6 TLDmax TECHNOLOGY

- The twines of the Green power-line are especially practical for long fences, because of the **TLDmax** conductors
- Because of the green colour, the twine fits perfectly to the landscape
- Very visible because of the white identification strand
- The high number of **TLDmax** conductors ensure a high energy flow
- Monofilaments with highest UV protection
- Plastic monofilaments for highest tensile strength
- 3 years warranty



TLD

TLD



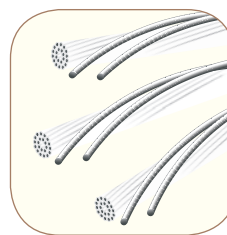
ANTI UV



Part no.	Product	Conductors	Colour	Ø	Spool	EAN	Piece
17183	GREEN-POWER R6	6	white	5-6mm	200m	4014803171832	1
17183-400	GREEN-POWER R6	6	white	5-6mm	400m	4014803438027	1

## FARMER

- For short fences only
- Colour: white



Part no.	Product	Conductors	Colour	Ø	Spool	EAN	Piece
153372	FARMER R6 200	6	white	6mm	200m	4014803438034	1
153372-400	FARMER R6 400	6	white	6mm	400m	4014803438041	1

Part no.	Spool	Conductors	Diameter stainless steel	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
153372	200m	6	0.20mm	—	4.05Ω/m	~250kg	4000m	1300m	8
153372-400	400m	6	0.20mm	—	4.05Ω/m	~250kg	4000m	1300m	3
17183	200m	6	—	0.22mm	0.22Ω/m	~350kg	14000m	4600m	8
17183-400	400m	6	—	0.22mm	0.22Ω/m	~350kg	14000m	4600m	3

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



## Guardian Hotline Electric Fencing

HIGHLIGHT  
★★★★★



NEW



## FENCE BUSTER™

Combining comfort with safety

Turnout rugs that work with electric fencing

Guardian's FENCE BUSTER™ turnout rug is designed to work with electric fencing to prevent escapes. The chest and neck areas of our patented Fence Buster rugs have the benefit of integrated panels designed to instantly transfer the pulse from an electric fence directly through to the inside of the rug; so your horse will feel the same effect from the electric fence as they would if not wearing a rug.

Normal rugs can make an electric fence ineffective as they insulate the horse from the fence. This patented product has been designed so that when the horse makes contact with an electrified fence, the shock bypasses the fabric and the shock from the electric fence is instantly transferred to the horse. (see step 3).

### How it Works Turnout rug: Step by step guide



#### Step 1:

The outer layer of the chest panel makes contact with an electrified fence.



#### Step 2:

The shock is transferred to the inner surface of the inside strap



#### Step 3:

The inside strap is in contact with the horse at the shoulder, so the horse feels shock from the fence

### Benefits

#### Electric fence panels in the rug & neck cover

This means if your horse walks into the fence, leans over or ducks under – the shock from the fence will be instantly felt by the horse the very instant they make contact with the fence.

#### 1680D Ballistic polyester outer

This strong 1680Denier weave provides ultimate strength and durability.

#### Teflon coated

The Teflon coating helps water to bead off the fabric instead of soaking in. This means in lighter rain the rug will not absorb the water – it will simply run off – and after heavy rain the Teflon will speed up the drying process and prevent the rug wetting out. If you re-proof your rugs once a year, this will regenerate the Teflon performance to give you perfect weather protection year after year.

#### 250g throughout rug & neck cover

A snug 250 filling throughout the rug and neck cover will keep your horse warm and cosy. The rug is designed so you can layer up multiple rugs underneath. The special strap inside will always be in contact with the horse – so you can ensure the full effect from your electric fence – even with 2 or more rugs on.

#### Breathable anti rub 190T Nylon lining

A soft breathable nylon lining providing comfort

#### Rip-stop chest & neck cover

The Fence Buster has rip-stop chest and neck electric fence panels – for that added touch of durability.

#### Removable rear leg straps

If you prefer a fillett strap to leg straps, simply remove one leg strap altogether, and use the other leg strap as a fillett strap.

#### Quick snap & adjustable chest closure

Quick snap chest clips for ease of fitting – also fully adjustable buckles to ensure the best fit for narrow and broad chested horses.

#### Extra large tail guard

The extra large tail flap for all round protection from the elements.

#### Taped seams

The main seams are taped to ensure no seeping.

## Fence Buster™ Turnout rug, removable neck cover and liner

- Electric fence panels in the rug & neck cover
- 1680D Ballistic polyester outer
- Teflon coated
- 250g throughout rug and neck cover
- Breathable anti rub 190T Nylon lining
- Rip-stop chest & neck cover
- Removable rear leg straps
- Quick snap & adjustable chest closure
- Extra large tail guard
- Taped seams
- Fleece wither relief pad
- Cross surcingle

Colour: burgundy

Part no.	Total length	EAN	Piece
47RUG250BNL-59	175cm / 5FT9IN	9 021385 4008998	1
47RUG250BNL-6	183cm / 6FT	9 021385 4009001	1
47RUG250BNL-63	191cm / 6FT3IN	9 021385 4009018	1
47RUG250BNL-66	198cm / 6FT6IN	9 021385 4009025	1
47RUG250BNL-69	206cm / 6FT9IN	9 021385 4009032	1



- Liner rug
- 420d polyester Outer
- Stain resistant
- 150g filling

## Fence Buster™ Turnout rug and removable neck cover

- Electric fence panels in the rug & neck cover
- 1680D Ballistic polyester outer
- Teflon coated
- 250g throughout rug and neck cover
- Breathable anti rub 190T Nylon lining
- Rip-stop chest & neck cover
- Removable rear leg straps
- Quick snap & adjustable chest closure
- Extra large tail guard
- Taped seams
- Fleece wither relief pad
- Cross surcingle

Colour: burgundy

Part no.	Total length	EAN	Piece
47RUG250BN-5	152cm / 5FT	9 021385 4008905	1
47RUG250BN-53	160cm / 5FT3IN	9 021385 4008912	1
47RUG250BN-56	168cm / 5FT6IN	9 021385 4008929	1
47RUG250BN-59	175cm / 5FT9IN	9 021385 4008936	1
47RUG250BN-6	183cm / 6FT	9 021385 4008943	1
47RUG250BN-63	191cm / 6FT3IN	9 021385 4008950	1
47RUG250BN-66	198cm / 6FT6IN	9 021385 4008967	1
47RUG250BN-69	206cm / 6FT9IN	9 021385 4008974	1
47RUG250BN-7	213cm / 7FT	9 021385 4008981	1

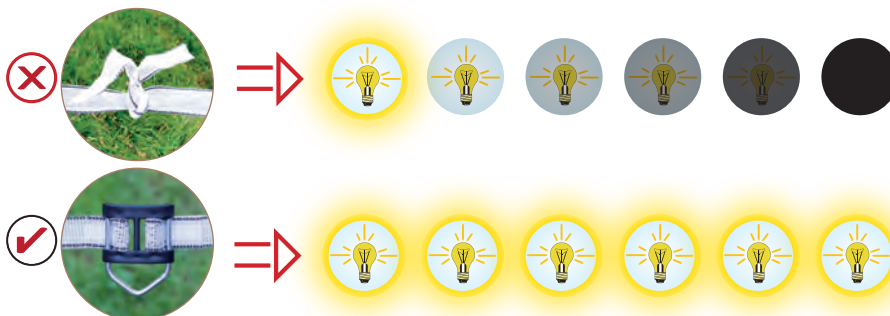


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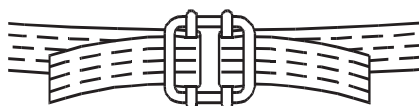
## Never knot your tape!

- Connectors guarantee a non-disturbed energy flow
- Knots and other bad connections disturb the energy flow
- The conductive material at multistranded fences will be connected in regular distances



## Tape connectors Aluminium

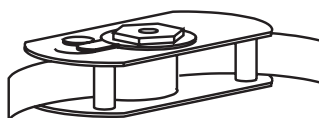
- Joins tapes up to 40mm simply and reliably
- Simple restraining possible



Part no.	Product	EAN	Piece
15163C	for tapes up to 20mm, aluminium	4 014803 405630	10
15164C	for tapes up to 40mm, aluminium	4 014803 405647	5

## Tape strainer Aluminium for tapes up to 20mm

- Ideal for tensioning tapes
- With just a few turns the tape is firmly tensioned and can be loosened again the other way round

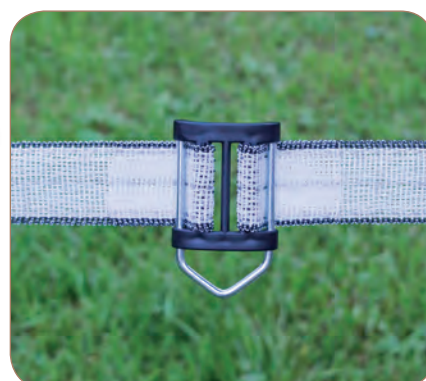


Part no.	Product	EAN	Piece
15455C	for tapes up to 20mm	4 014803 405715	2



## Tape connector 40mm

- Easy to apply to the tape
- Fits to all usual tapes
- Continuous metal support
- Sturdy tape connector with metal supports out of one piece supported by unbreakable plastic



Part no.	EAN	Piece
14987C	4 014803 149879	5

HIGHLIGHT  
★★★★★



## Tape connector 20mm

- Easy to apply to the tape
- Fits to all usual tapes
- Continuous metal support
- Sturdy tape connector by metal supports out of one part
- Unbreakable plastic

Part no.

14988C

EAN



Piece

10



HIGHLIGHT  
★★★★★



## Tape connection for gate handles

- Tape is easy and safe to use
- Fits to all usual tapes
- Galvanized metal support
- Sturdy tape connector with metal supports out of one piece supported by unbreakable plastic

Part no.

14989C

EAN



Piece

2



## Tape connection cable with 2 screw clips for tape up to 40mm

- This tape connection cable with clips will connect 2 tapes up to 40mm running parallel or bridge two tape ends
- Cable length 50cm
- Screw fixing allows for very firm connection

Part no.

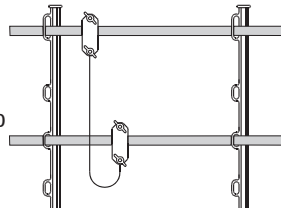
10446C

EAN



Piece

1



stainless steel

## Wire connector

- For a secure and durable connection of polywires
- For connections from twines to gate handles

galvanized

Part no.

15063C

EAN



Piece

10

stainless steel

Part no.

14045C

EAN



Piece

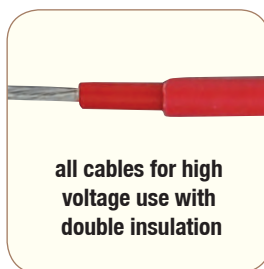
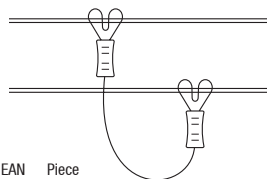
10



stainless steel

## Wire connection cable with 2 heart clips

- Cable length 50cm
- For vertical connections of wires



Part no.

**10440C**

EAN



Piece



## Wire joining clamp

- For securely connecting steel wires.
- To join two ends and for making vertical connections



Part no.

**15526C**

EAN



Piece



## Wire connection screw

- Galvanized connection screw for connecting several iron- and steel wires



Part no.

**14197C**

EAN



Piece



## Wire connection screw with plastic coating

- Connection screw with plastic coating and nut for connecting several iron- and steel wires



Part no.

**14356**

EAN



Piece



## Gripper wire joiner

- For 1mm – 3.25mm wire. Ensures a lasting connection between two wire ends
- Suitable also for end assemblies at corner posts



**For wire 2 – 3.25mm**

Part no.

**15960**

EAN



Piece



**For wire 1 – 2mm**

Part no.

**15967**

EAN



Piece



## Gripper tool

- Suitable for gripper wire joiner
- With this tool up to 400kg tension can be put on the wire
- Adjustment of the tension through measurement



Part no.

**15962**

EAN



Piece





## Wire and rope strainer



i



### Wire- and rope strainer

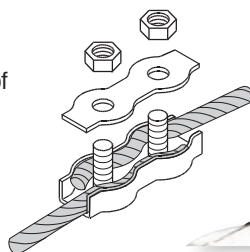
- Suitable for wires, ropes up to 6mm diameter and tapes up to 13mm diameter
- Easy to apply
- Easy straining is possible at any time
- The wire or the rope does not have to be cut

Part no.	EAN	Piece
14991	4 014803 149916	2



### Rope connector

- For a secure and durable connection of electrifiable ropes
- To connect ropes on gate handles
- To connect the rope on start and ends insulators



#### 4–6mm ø, galvanized

Part no.	EAN	Piece
15483C	4 014803 405746	5

#### 7–8mm ø, galvanized

Part no.	EAN	Piece
15363C	4 014803 408396	3

#### 4–6mm ø, stainless steel

Part no.	EAN	Piece
15506C	4 014803 408426	5

#### 7–8mm ø, stainless steel

Part no.	EAN	Piece
14053C	4 014803 140531	3



## Rope connector super

- Designed for easy connection of rope ends. (ø 5–6mm).
- Ensures excellent conductivity across the joint
- To connect ropes on gate handle
- To connect the rope on start and ends insulators

stainless  
steel



### 7–8mm ø, stainless steel

Part no.	EAN	Piece
14054C	4 014803 140548	5

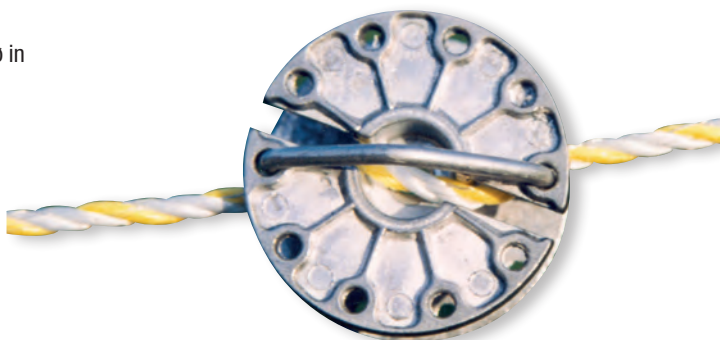
### 5–6mm ø, galvanized

Part no.	EAN	Piece
15314C	4 014803 405913	5

## Rope strainer 8mm ø

- Suitable for all types of steel wire and electrified rope up to 8mm ø in permanent or temporary fences
- Complete with arrester lock
- Allows insertion of wire and rope without cutting the ends

**Attention: Ideally suited to wire from 1.0 – 2.8mm ø**



Part no.	EAN	Piece
15937C	4 014803 405463	2

Part no.	EAN	Piece
15937–25	4 014803 413192	25

## Connection cable with rope clamp

- Connection cable with two rope clamps for optimum mechanical and electrical connection between two electrical ropes
- For ropes up to 6mm ø
- Length of the cable: 50cm



stainless  
steel

### 7–8mm ø, stainless steel

Part no.	EAN	Piece
10597C	4 014803 105974	1

### 5–6mm ø, galvanized

Part no.	EAN	Piece
10596C	4 014803 105967	1

# Insulators

HIGHLIGHT



Unique  
Insulator with perfect  
isolation!  
> p.107

Insulators lead the conductive material around the area fenced in. A high isolation capacity is necessary to avoid an unintentional loss of energy. Please find the right insulators for your fence on the following pages.



HIGHLIGHT



## Fixating

Suitable for tapes, twines and ropes. The conductor material is fixed.  
> see.p 104



HIGHLIGHT



## Helpful device

To screw in the insulators with a cordless drill.  
> see p. 109



HIGHLIGHT



## Distance

Keep conductor material at a distance.  
> see p. 112

## Chapter

## Page

**Insulators I** product guide I  
overview 100  
– 101

**Insulators I** for tapes 102  
– 105

**Insulators I** for twines 106  
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**Insulators I** for wires 110

**Insulators I** for ropes 111

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I corner insulators 112  
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**Insulators I** supplementary  
insulators 115  
– 118



	Part no.	Description	Suitable for				Suitable as		Fixation		Fence material is		Support		UV-stability	Page
			tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance insulator	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short		
Tape																
	15843	TURBOMAX I–40 PLUS	40	8	4		●	●		5	●				●	102
	14161	EQUIBLOCK	40		4		●			5	●				●	103
	15373	RANGER I–40 FIX	40				●			5	●				●	103
	15388	RANGER IS–40 FIX	40				●		6		●			●	●	103
	15682	COMBI IS–40	40	8	4		●	●	6			●		●	●	104
	15460	RANGER I–40	40				●			5		●			●	104
	14990	RANGER I–40FIX PLUS	40	8			●			5	●				●	104
	15571	CORNER I–40	40	8	4		●			5		●			●	105
	15572	CORNER I–40 PLUS	40					●		5	●				●	105
	15555	RANGER IS–20	20		4		●		5			●			●	103
Twine																
	15370	RANGER IS–L	13		4		●	●	6			●	●		●	106
	15461	RANGER IS–S	13		4		●	●	6			●		●	●	106
	15364	FARMER IS–L	13		4		●	●	5.3			●		●	●	107
	140271	GIGANT IS–S	13		4		●	●	6			●		●	●	107
	14984	FARMER PND	13		4		●		8			●			●	107
	15275	FARMER IS–S	13		4		●		5.3			●		●	●	108
	14176	TRAPPER IS–S	13		4		●		5.3			●		●	●	108
	15485	RANGER IS–W PC			3		●	●	6		●	●	●		●	108
	15275	FARMER IS–W			3		●		5.3		●	●	●		●	108
	153021	Nailway insulator			2		●			Nail		●			●	108
	15495	Bobbin insulator			2		●			Nail		●			●	109
	15457	Staple insulator			2		●			Staple		●			●	109
Wire																
	15929	HOT STOP I–20	20	8		2.5	●	●		5		●			●	110
	14164	Permanent fence insulator Economy		6		2.5	●	●		5		●			●	110
	14165	Wire insulator Economy		6	4	2.5	●	●		5		●			●	110
	14933	Pin–Lock			4	2.5	●	●		5		●			●	110
Rope																
	15835	TURBOMAX IS–8	13	8	4		●	●	6			●		●	●	111
	14198	Insulator for rope standard	13	8	4		●		6			●		●	●	111
	14408	Insulator for rope	13	8	4		●			5		●		●	●	111
Distance insulators																
	14938	COMBI ISD–40	40	8	4		●		6			●		●	●	112
	15186	RANGER ISD–20	12		4		●		6			●		●	●	112
	15838	TURBOMAX ISD–8	13	8	4		●		6			●		●	●	112
	15073	TURBOMAX ISD–8 metric	13	8	4		●		M6			●		●	●	112
	15595	RANGER ISD	20		4		●		6			●		●	●	113
	14937	FARMER ISD	13		4		●		6			●		●	●	113
Corner insulators																
	15830	Corner insulator	40					●				●		●	●	144
	10012	CORNER IS–W		8	4			●	7			●		●	●	113
	15183	CORNER I–W			4			●		5		●			●	114

	Part no.	Description	Suitable for				Suitable as		Fixation		Fence material is		Support		UV–stability	Page
			tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance insulator	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short		
Strain insulators																
	15925	Porcelain				2.5	●	●			●	●				114
	14061	ABS				2.5	●	●			●	●			●	114
	15070	PP				2.5	●	●			●	●			●	114
	15194	Porcelain				2.5	●	●			●	●			●	114
Supplementary insulators																
	15059	Spare insulator			4		●					●			●	115
	15053	Spare insulator			4		●					●			●	115
	150511	Metal clip			4		●					●			●	115
	15415	Spare insulator	20		4		●					●			●	115
	15805	Splint insulator			4		●					●			●	115
	15293	Ring insulator			4		●					●			●	115
	14046	clip insulator for Fibreglass posts	13		4		●					●			●	117
	15129	IP–15		8	4		●					●			●	116
	15290	COMBI IP–15	13	6	4		●					●			●	116
	14969	Tape insulator	40		4		●					●			●	116
	15474	IP19	20		4		●					●			●	117
	14903	CLIP MASTER			4	2.5										117
	14922	Head insulator			4	2.5	●				●				●	117
	15480	Plastic loop	20	8	4		●					●			●	117

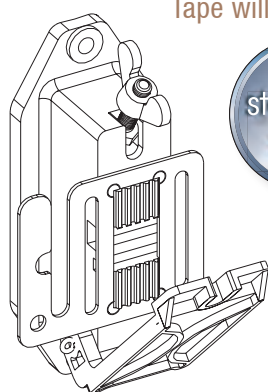
### Meaning of colours:



Ideally suited



Limited suitability



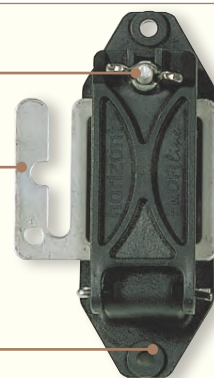
Tape will be fixed !



No risk of losing the screw as it is held in the housing by a nut

The connection plate can be used to attach a sub-division tape, also to connect to a gate handle or lead out cable

Holds up extremely tractive forces for electric fencing material



## TURBOMAX I-40 PLUS (with connection plate)

Part no. EAN Piece

15843C



## Connection plate (without picture)

Part no. EAN Piece

14874



## TURBOMAX I-40 (without connection plate)

Part no. EAN Piece

15837C



## horizont multi-purpose insulator

The following facts speak for our tape insulator TURBOMAX I-40 / I-40 PLUS:

- massive insulation body due to high material input
- fixation of tapes up to 40 mm
- fixation of ropes up to 8 mm
- connection plate (I-40 PLUS) for connection of tapes and twines
- ideal for the beginning of your fence or as an end insulator or 3-way insulator (I-40 PLUS)



As insulator for fence opening



As insulator with tape connection



As three-way insulator



As insulator with gate connection



As insulator for cross connection of tape with cable



Easy simple handling – one hand strains the tape, the other one fasten the screw

## EQUIBLOCK

The EQUIBLOCK insulator keeps the tape strained and safe in this insulator. EQUIBLOCK insulators are available in two different versions, with and without rubber inlay. Specially with the version with rubber inlay 20mm and 40mm tape is fixed and strained in the insulator. The insulator is closed with two plastic screws.

### Tape insulator EQUIBLOCK

- Screw in and nail on tape insulator for wooden and recycled posts
- Full plastic insulator for all tapes up to 40mm
- The tape is fixed in the insulator by the screws

Part no.		EAN	Piece
14161C		4 014803 141613	8
14161EI		4 014803 428929	30

UV



Tape will be fixed!



With rubber strip!

### Tape insulator EQUIBLOCK Plus

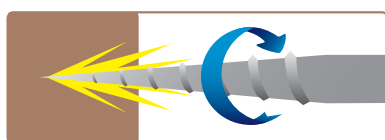
- Same insulator as 14161, but with additional rubber inlay. Thus the tape is protected and has longer life expectancy

Part no.		EAN	Piece
14162C		4 014803 141620	8

UV



Tape will be fixed!



### horizontal insulator backing with thread for wood

- Long and taper thread for easy installation
- Self-tapping thread for screwing – in easily
- Primary drilling and primary counterbore is not required
- Sharp thread edges for a secure fit
- Insulator backing is produced with specially coated steel

### RANGER I-40 FIX

- The special design allows secure fastening of the tape thus ensuring the required tape strain
- Can be nailed on or screwed in
- Big insulator area (drying surface) from tape to post

Part no.		EAN	Piece
15373C		4 014803 408402	12

UV



Tape will be fixed!



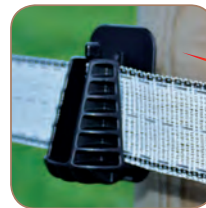
### RANGER IS-40 FIX

- Safe fixing of tape because of special process in the insulator
- Big insulator area (drying surface) from tape to post
- Support with wooden thread

With screw in support

Part no.		EAN	Piece
15388C		4 014803 408419	15

UV



Tape will be fixed!



### RANGER IS-20

- Wooden thread
- For tapes up to 20mm
- For ropes up to  $\varnothing$  4mm

Part no.		EAN	Piece
15555-25		4 014803 408365	25
15555C		4 014803 405814	25
15555EI		4 014803 002945	100

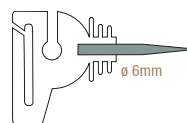
UV



## COMBI IS-40

- Short support
- Big drying surface
- Wooden thread
- For tapes up to 40mm
- For Twines and ropes up to 8mm ø

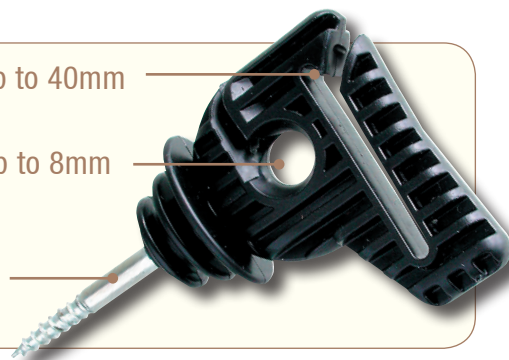
Part no.		EAN	Piece
15682		4 014803 156822	30
15390C		4 014803 153906	25
15390EI		4 014803 413147	80
15390EI-150		4 014803 426840	150



For tapes up to 40mm

For ropes up to 8mm

Easy to screw in



Allows free movement!



## COMBI IS-40 happy

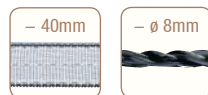
Part no.	Colour		EAN	Piece
15390HG-30	lime		4 014803 444646	30
15390LI-30	purple		4 014803 441966	30
15390TU-30	turquoise		4 014803 441942	30



## RANGER I-40

- Can be nailed on or screwed in
- For tapes up to 40mm
- For ropes up to 8mm ø

Part no.		EAN	Piece
15460-10		4 014803 408372	10
15460C		4 014803 405401	20



Allows free movement!

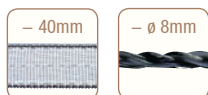


## HIGHLIGHT

## RANGER I-40 FIX PLUS

- For screwing in or nailing on
- Can also fix with cable ties
- For tapes up to 40mm
- For wires and ropes up to 8mm ø

Part no.		EAN	Piece
14990		4 014803 149909	25
14990C		4 014803 446527	20
14990EI		4 014803 446534	120



Tape will be fixed!



## CORNER I-40

- Very suitable as a corner insulator
- For tape up to 40mm
- Also suitable for 40mm tapes without corner function
- Also suitable as standard insulator
- Screw in and nail on possible



UV



Allows free movement!



### INOX, with bolt, stainless steel

Part no. EAN Piece  
**15571C** 4 014803 405821 2

### with bolt, galvanized

Part no. EAN Piece  
**15297** 4 014803 152978 5

## CORNER I-40 PLUS

- Suitable for start- or end- insulator for tapes up to 40 mm
- Screw in and nail on possible



UV



Tape will be fixed!



### INOX, with bolt and buckle, stainless steel

Part no. EAN Piece  
**15572C** 4 014803 405838 2

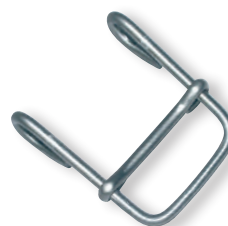
### with bolt and buckle, galvanized

Part no. EAN Piece  
**15299** 4 014803 152992 5

## Spare buckle for corner insulator

- to connect further tapes
- refined steel

Part no. EAN Piece  
**15296C** 4 014803 420480 4



## Tape insulator CORNER I-40 PLUS with tape strainer

- For tape up to 40mm
- Easy and secure straining
- With protection against twisting
- Smooth setup change in existing fence system
- Screw in and nail on possible



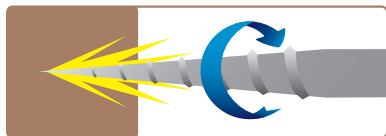
UV



Tape will be fixed!



Part no. EAN Piece  
**14163C** 4 014803 141637 2



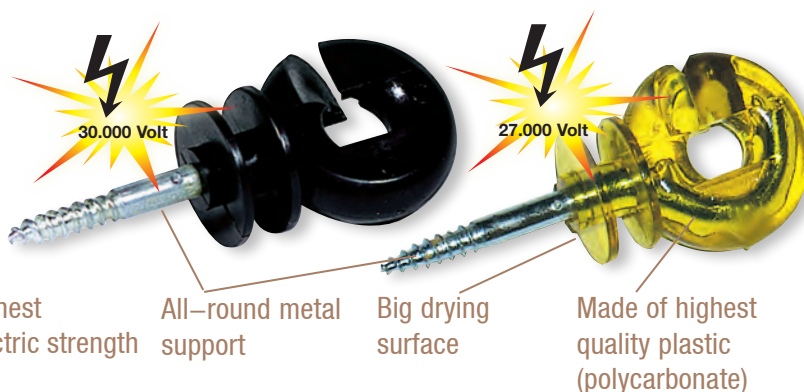
## horizont insulator backing with thread for wood

- Long and taper thread for easy installation
- Self-tapping thread for screwing in easily
- Primary drilling and primary counterbore is not required
- Sharp thread edges for a secure fit
- Insulator backing is produced with specially coated steel

### RANGER IS-L

- With short support
- Big drying surface
- Wooden thread

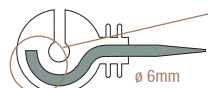
Part no.	EAN	Piece
15370	4 014803 153708	25
15370C	4 014803 421616	25
15370-50	4 014803 405340	50
15370EI	4 014803 002792	120
15370EI-240	4 014803 428554	240



### RANGER IS-L PC

- All-round metal support
- Big drying surface
- Wooden thread

Part no.	EAN	Piece
15341-25	4 014803 421630	25
15341C	4 014803 153418	25



### RANGER IS-L happy

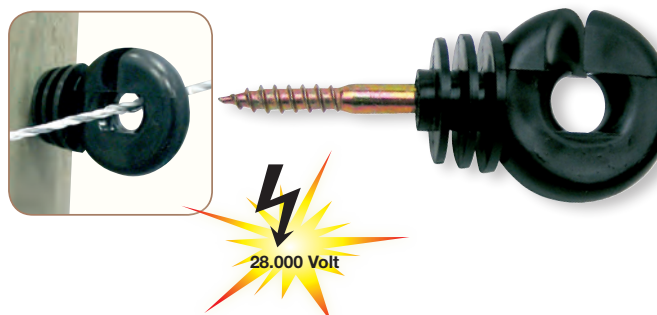
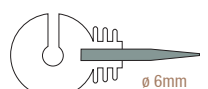
Part no.	Color	EAN	Piece
15370HG	lime	4 014803 444639	25
15370LI	purple	4 014803 444676	25
15370TU	turquoise	4 014803 444652	25



### RANGER IS-S

- With short support
- Big drying surface
- Backing and wooden thread

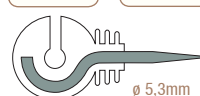
Part no.	EAN	Piece
15461	4 014803 154613	25
15461C	4 014803 421623	25
15461-50	4 014803 405357	50
15461EI	4 014803 002785	120



## FARMER IS-L

- All-round metal support
- Big drying surface
- Wooden thread

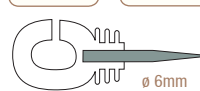
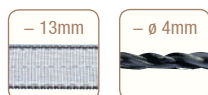
Part no. **15364** EAN **4 014803 153647** Piece **50**



## GIGANT IS-S

- With short support
- Extra large wire support
- Big drying surface
- Wooden thread

Part no. **140271** EAN **4 014803 432353** Piece **25**



HIGHLIGHT



## Isolator FARMER PND

- Full plastic body made out of one piece
- Very high insulation
- Easy handling and quick assembly
- Safe support through functional principal of pegs
- Universal use – fits all drills

Part no. **14984** EAN **4 014803 149848** Piece **50**  
**14984EI** EAN **4 014803 446374** Piece **150** \*

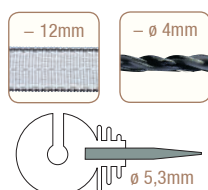


\*The bucket contains a universal 8mm HSS-drill attachment free of charge



## FARMER IS-S

- With short support
- Big drying surface
- Wooden thread



Part no.	Product	EAN	Piece
15275C	black	4 014803 420695	25
15275	black	4 014803 152756	50
15275-25	black	4 014803 420923	25
15275EI	black	4 014803 419859	100
15275GE	yellow	4 014803 417602	50
15275GE-25	yellow	4 014803 420916	25
15275RT	red	4 014803 421586	50

UV



## Farmer-Box

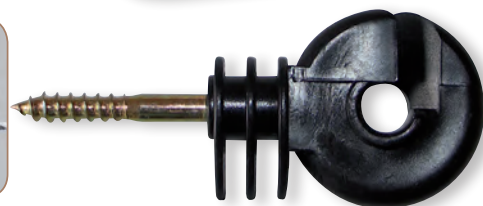
- Contains**
- 97 insulators 15275
  - 2 gate handles 15817SW
  - 1 screw aid 15357

Part no.	EAN	Piece
14957EI	4 014803 443441	100

## TRAPPER IS-S

- Backing and wooden thread

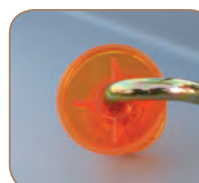
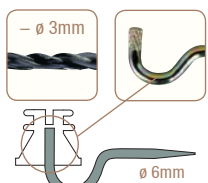
Part no.	EAN	Piece
14176	4 014803 141767	25
14176-50	4 014803 428752	50



## RANGER IS-W PC

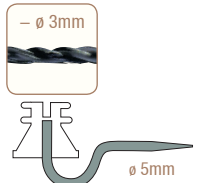
- Made of highest quality plastic material polycarbonate
- For wire up to 2mm
- Wooden thread

Part no.	EAN	Piece
15485	4 014803 154859	25
15485C	4 014803 421647	25



## Farmer IS-W

- For wire up to 2mm
- Wooden thread



Part no.	Product	EAN	Piece
15278	black	4 014803 152787	50
15278-25	black	4 014803 420947	25
15276	yellow	4 014803 152763	50
15276-25	yellow	4 014803 420930	25

UV

## Nailway insulator

with nail

Part no.	EAN	Piece
15302	4 014803 405838	50



### Hint!

Not recommended for use with strong 230V or 12V operated fencers.



## Bobbin insulator

with nail

Part no.	EAN	Piece
<b>15495-100</b>	4 014803 405968	100

with nail

Part no.	EAN	Piece
<b>15495C</b>	4 014803 420404	25



### Hint!

Not recommended for use with strong 230V or 12V operated fencers.



## Staple insulator

with nail

Part no.	EAN	Piece
<b>15457</b>	4 014803 154576	100



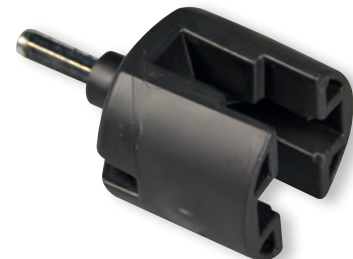
### Hint!

Not recommended for use with strong 230V or 12V operated fencers.

## Screw in aid universal

- For use with drill bites
- Suitable for all ring insulators, gate handle insulators and corner insulators (Corner IS-W)

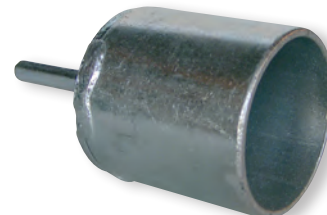
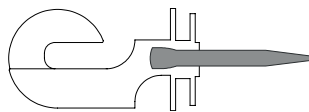
Part no.	EAN	Piece
<b>14965</b>	4 014803 149657	1
<b>14965C</b>	4 014803 444585	1



## Screw in aid for wire and rope insulators

- For use with drill bits
- Suitable for all Turbomax twines and rope insulators (see p. 111)

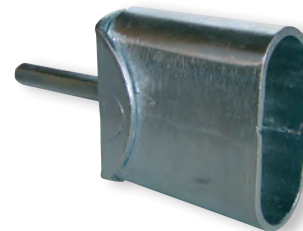
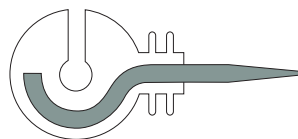
Part no.	EAN	Piece
<b>15349C</b>	4 014803 431721	1



## Screw in aid for ring insulators

- For use with drill bits
- Suitable for all ring insulators up to 16mm thickness (horizont types see p. 106 – 108)

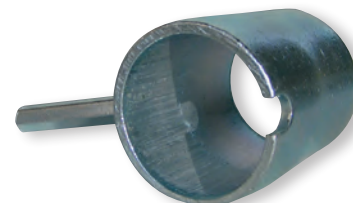
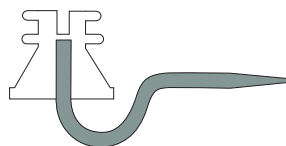
Part no.	EAN	Piece
<b>15357C</b>	4 014803 431738	1



## Screw in aid for slit insulators

- For use with drill bits
- Suitable for all slit insulators from horizont (see p. 108)

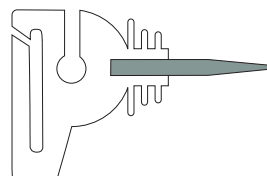
Part no.	EAN	Piece
<b>15358C</b>	4 014803 431714	1



## Screw in aid for COMBI IS-40

- For use with drill bits
- Suitable for all COMBI insulators from horizont (see p. 104)

Part no.	EAN	Piece
<b>14088C</b>	4 014803 431745	1



i



## HOT STOP I-20

- Extremely solid and UV-resistant insulator
- Ideal for high tensile wire GALVADUR
- For tapes up to 20mm and ropes up to 8mm Ø
- Insulator can be screwed in or nailed on
- The most powerful of its class



Part no.	EAN	Piece
<b>15929-10</b>		
<b>15929C</b>		
<b>15929EI</b>		



### Hint!

When assembling in curves the insulator has to be mounted with pressure in direction to the post.

## Permanent fence insulator Economy

- For wires and rope up to 8mm
- For fence tapes up to 12mm
- To be nailed or screwed onto posts



Part no.	EAN	Piece
<b>14164</b>		

## Wire insulator Economy

- For wires and rope up to 6mm
- For fence tapes up to 12mm
- To be nailed or screwed onto posts



Part no.	EAN	Piece
<b>14165</b>		

## Pin-Lock

- Insulator with wooden thread for twines up to 4mm and permanent fencing twines 1.6 and 2.5mm



Part no.	EAN	Piece
<b>14933-50</b>		

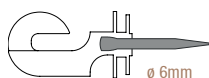


These insulators are unique twine and rope insulators. They are great in the hand and thus allow mounting without additional tools. The special feature is the construction of the insulator head. The fence material is inserted easily from above, so the fence material will not fall out at a later date. We offer this top product as a special insulator for electrical rope up to 8mm.



## TURBOMAX IS-8

- Special insulator for rope up to 8mm
- Big drying surface
- Very big distance from ropes to posts
- Short support
- With wooden thread



Applicable for corner insulators!

Part no.

15835C

EAN



Piece



## Insulator for rope standard

- Insulator for rope up to 8mm
- Short support
- With wooden thread



Part no.

14198

EAN



Piece



## Insulator for rope

- Insulator with wooden thread for ropes up to 8mm and tapes up to 12mm



Part no.

14408

EAN



Piece



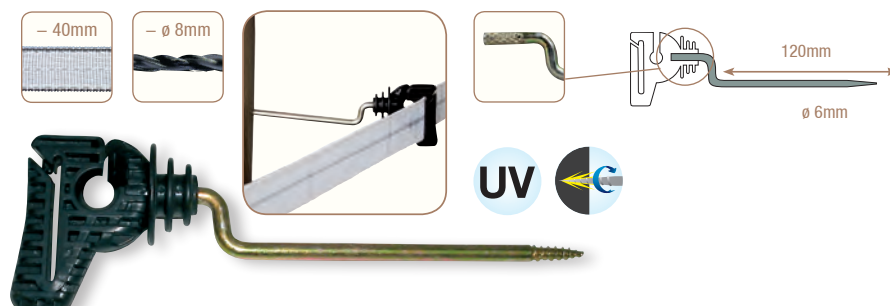
### COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**15828C**



### HIGHLIGHT



### COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**14938-10**



**14938C**



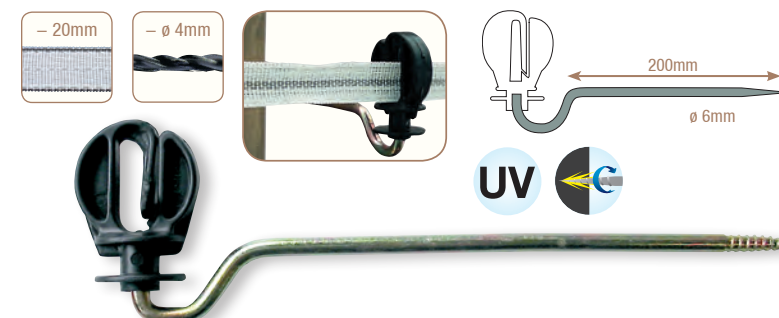
### RANGER ISD-20

- Ideal for fixation of tapes up to 20mm
- Tape cannot slip out
- Also suitable for twines
- Wooden thread

Part no.

EAN Piece

**15186**



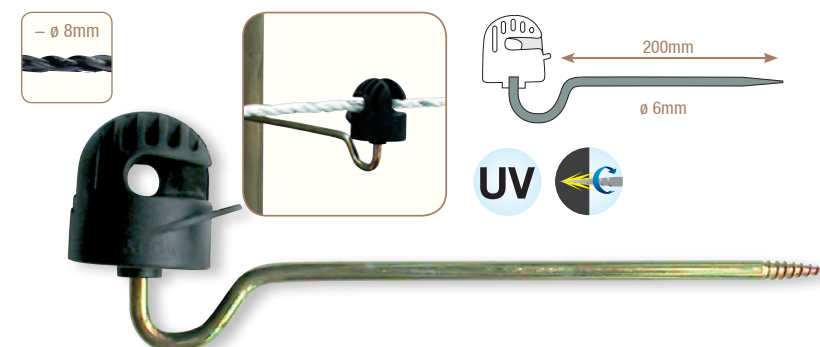
### TURBOMAX ISD-8

- For rope up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**15838C**



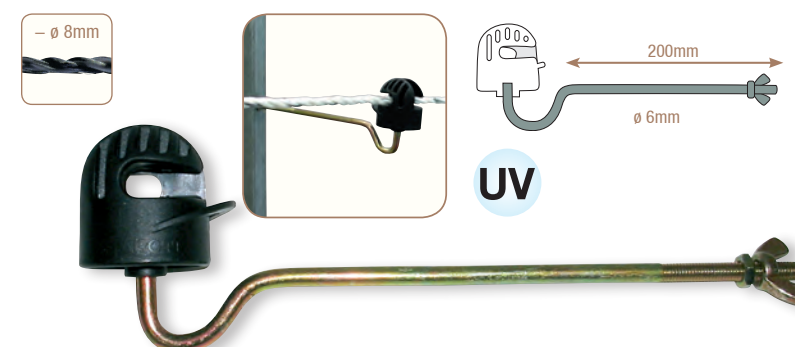
### TURBOMAX ISD-8 metric

- For rope up to 8mm  $\phi$
- Wooden thread
- With metric thread M6
- Big drying surface

Part no.

EAN Piece

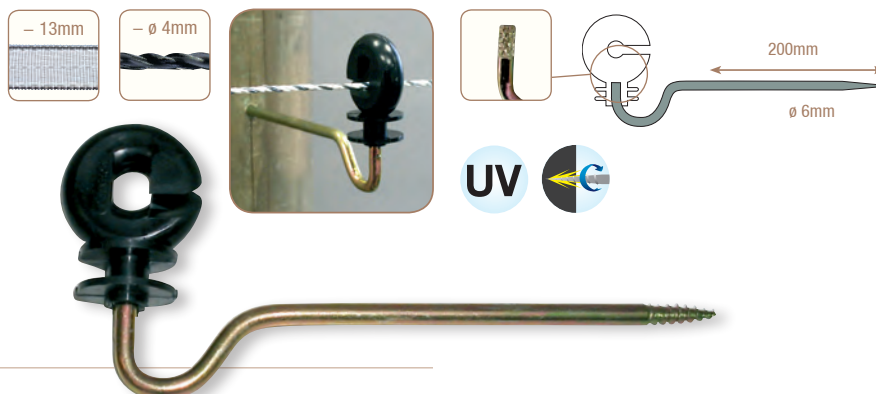
**15073C**



## RANGER ISD

- Large wire support
- Wooden thread
- High insulation

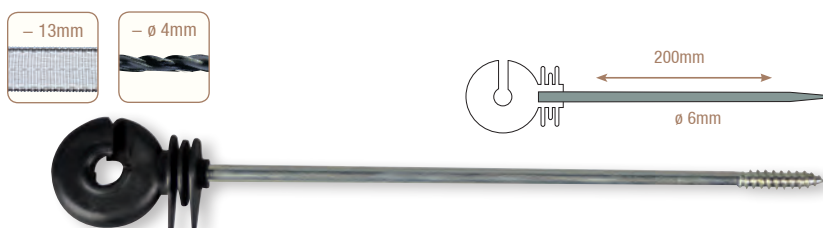
Part no. **15595** EAN **4 014803 155955** Piece **10**



## FARMER ISD

- Large wire support
- Wooden thread

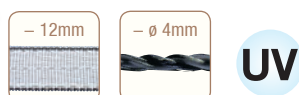
Part no. **14937** EAN **4 014803 149374** Piece **10**



## Flexibar 400, one-sided

Distance from post 40cm

Part no. **15318** EAN **4 014803 153180** Piece **10**



- Made from extruded plastic material therefore extremely long life
- Suitable for all wire, rope and tape
- Delivered with 20 staples



## Flexibar 600, two-sided

Distance from post each way 30cm

Part no. **15319** EAN **4 014803 153197** Piece **10**

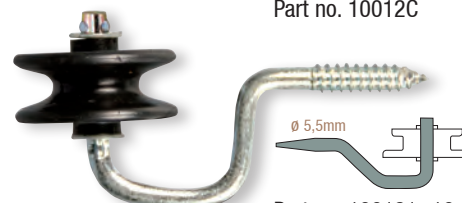
## CORNER IS-W

- Wooden thread

Part no. **10012-10** EAN **4 014803 422446** Piece **10**  
**10012C** EAN **4 014803 405371** Piece **5**  
**100121-10** EAN **4 014803 440679** Piece **10**



Part no. 10012-10  
Part no. 10012C

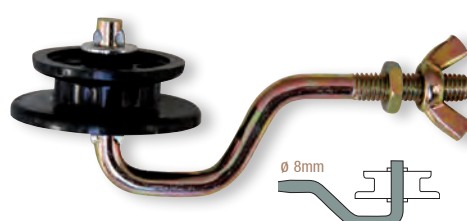


Part no. 100121-10

## Corner insulators „CORNER IS-W“

- With metric thread M8
- Thread length 30mm

Part no. **14166C** EAN **4 014803 141668** Piece **5**



## Insulators

### Corner and supplementary insulators

#### Corner insulator

- Big corner insulator for tapes up to 40mm
- Wooden thread



Part no.

EAN

Piece

**15830**



#### CORNER I-W

without nail

Part no.

EAN

Piece

**15183-10**



#### CORNER I-W

with nail

Part no.

EAN

Piece

**14089C**



#### Heavy duty corner knob made from porcelain

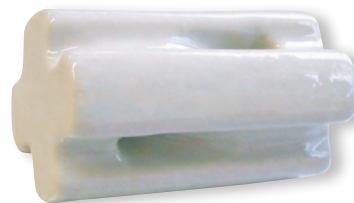
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

**15925**



#### Heavy duty corner knob ABS

- For rope up to 8mm ø
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

**14061C**



#### Heavy duty corner knob

- For rope up to 8mm ø
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

**15070**



**15070C**



#### Heavy duty corner insulator

Part no.

EAN

Piece

**15194-10**



## Spare insulator

- Spare insulator for oval posts and round posts (see p. 135)



### with plastic ring for round post

Part no.	EAN	Piece
15059-50	4 014803 405326	50

### with plastic ring for oval post

Part no.	EAN	Piece
15053-50	4 014803 405302	50

### with metal ring for round post

Part no.	EAN	Piece
15060-50	4 014803 405333	50

### with metal ring for oval post

Part no.	EAN	Piece
15054-50	4 014803 405319	50



## Spare insulator with metal clip

- For all 8mm round- or metal posts (see p. 135)



Art.-Nr.	EAN	Einheit
150511	4 014803 432360	25



## Spare insulator plastic

- For all 8mm round- or metal posts (see p. 135)



Part no.	EAN	Piece
15415	4 014803 154156	25



### Splint insulator with metal splint

- For angle steel posts with 2mm and 3mm (see p. 135)

Part no.	EAN	Piece
<b>15805</b>		



### Ring insulator with metric thread

- For angle steel posts with 2mm and 3mm (see p. 135)
- With metric thread M6
- Thread length 30mm

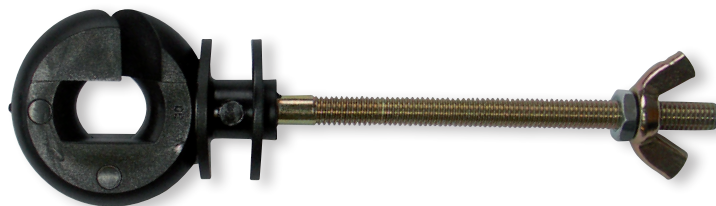
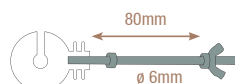
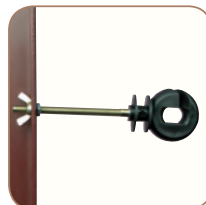
Part no.	EAN	Piece
<b>15293</b>		
<b>152931</b>		



### Ring insulator with metric thread



- Metal/thread length 80mm
- With metric thread M6
- For twines and tapes up to 12mm

Part no.	EAN	Piece
<b>14167</b>		



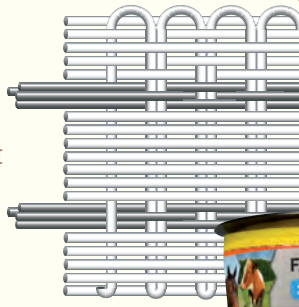
### Add on and clip insulator for Fibre glass posts

- Suitable on 10mm posts (see p. 132)
- For twines and tapes up to 12mm

Part no.	EAN	Piece
<b>14046-25</b>		
<b>14046C</b>		
<b>14046EI</b>		



Grouped stainless steel conductors for best conductivity and highest breaking strength



### FARMER

- These standard tapes are suitable for short fences and paddocks
- High breaking strength
- Monofilaments with a high UV-stability
- Colour: white, yellow/orange or green.

PE



Part no.	Product	Width	Colour	Spool	EAN	Piece
17451	FARMER T10-W	10mm	white	200m	4014803174512	1
17287	FARMER T10-O	10mm	yellow/orange	200m	4014803172877	1
17475	FARMER T20-W	20mm	white	200m	4014803174758	1
17475GR	FARMER T20-G	20mm	green	200m	4014803428806	1
17528	FARMER T20-O	20mm	yellow/orange	200m	4014803175281	1
17458	FARMER T40-W	40mm	white	200m	4014803174581	1
17458GR	FARMER T40-G	40mm	green	200m	4014803428813	1



### FARMER in double packs

Part no.	Product	Width	Colour	Spool	EAN	Piece
17271	FARMER T10-W	10mm	white	2 x 200m	4014803172716	1
17272	FARMER T20-W	20mm	white	2 x 200m	4014803172723	1
17273	FARMER T10-O	10mm	yellow/orange	2 x 200m	4014803172730	1
17274	FARMER T20-G	20mm	yellow/orange	2 x 200m	4014803172747	1

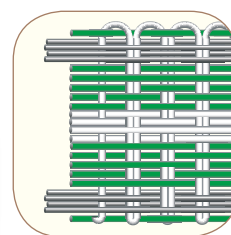


Part no.	Width	Spool	Con- ductors	Diametre stainless steel	Resistance		Max rec. fence length		
							main fences / 12V*	dry battey fences*	
17451	10mm	200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	18
17287	10mm	200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	18
17475	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17475GR	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17528	20mm	200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	15
17458	40mm	200m	8	0.15mm	5.4Ω/m	~120kg	3300m	1100m	8
17458GR	40mm	200m	8	0.15mm	5.4Ω/m	~120kg	3300m	1100m	8
17271	10mm	2 x 200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	16
17272	20mm	2 x 200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	8
17273	10mm	2 x 200m	3	0.15mm	14.4Ω/m	~40kg	1800m	500m	16
17274	20mm	2 x 200m	4	0.15mm	10.8Ω/m	~90kg	2500m	800m	8

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

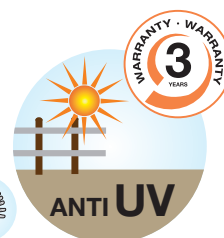
### GREEN power-line TLDmax TECHNOLOGY

- The tapes of the Green power-line are especially practical for long fences, because of the **TLDmax** conductors
- Because of the green colour, the tape fits perfectly to the landscape
- Good visibility because of the white identification strand
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Width	Colour	Spool	EAN	Piece
17118	GREEN-POWER T12	12mm	green	200m	4014803171184	1
17119	GREEN-POWER T20	20mm	green	200m	4014803171191	1
17120	GREEN-POWER T40	40mm	green	200m	4014803171207	1

PE

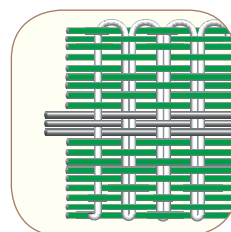


### HIGHLIGHT



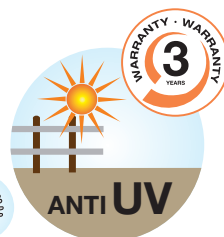
### HOBBYGARD T8 TLDmax TECHNOLOGY

- The tapes of the HOBBYGARD T8-line are especially practical for long fences, because of the **TLDmax** conductors
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Green with white identification strand



Part no.	Product	Width	Colour	Spool	EAN	Piece
17126	HOBBYGARD T8	8mm	green	100m	4014803171269	1

PE

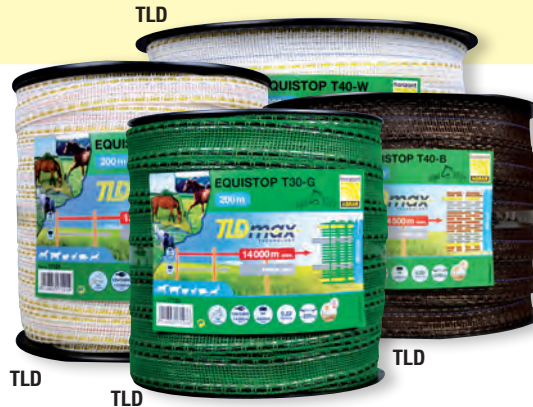


Part no.	Width	Spool	Conductors	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
17118	12mm	200m	3		0.35Ω/m	~60kg	12 000m	4 000m	18
17119	20mm	200m	5		0.27Ω/m	~120kg	13 500m	4 500m	15
17120	40mm	200m	8		0.2Ω/m	~180kg	14 500m	4 800m	8
17126	8mm	100m	3		0.35Ω/m	~30kg	12 000m	4 000m	42

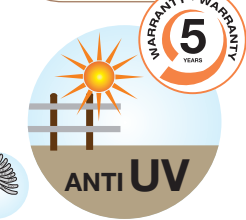
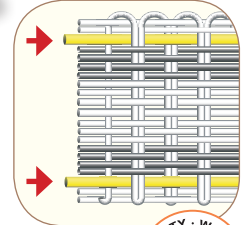
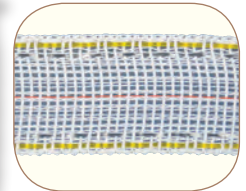
\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

### EQUISTOP **TLDmax** TECHNOLOGY

- The tapes of the Equistop-line are especially practical for long fences, because of the **TLDmax** conductors
- High tensile load is possible because of strengthened outer edges
- Grouped **TLDmax** conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Colours white, brown and green



**Strengthened monofilament edges 1.4mm Polyamid !**

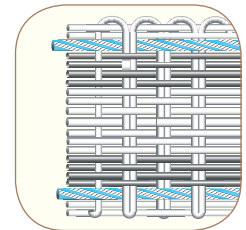


Part no.	Product	Width	Colour	Spool	EAN	Piece
17121	EQUISTOP T20-W	20mm	white	200m	4 014803 171214	1
17122	EQUISTOP T20-B	20mm	brown	200m	4 014803 171221	1
17123	EQUISTOP T30-G	30mm	green	200m	4 014803 171238	1
17124	EQUISTOP T40-W	40mm	white	200m	4 014803 171245	1
17125	EQUISTOP T40-B	40mm	brown	200m	4 014803 171252	1



### Happy **TLDmax** TECHNOLOGY

- The happy-tapes are available in widths of 20mm and 40mm
- Highly visible coloured edges



Part no.	Product	Width	Colour	Spool	EAN	Piece
17136HG	Happy NT2.0	20mm	lime/white/lime	200m	4 014803 444677	1
17136LI	Happy NT2.0	20mm	purple/white/purple	200m	4 014803 444684	1
17136TU	Happy NT2.0	20mm	turquoise/white/turquoise	200m	4 014803 444691	1
17137HG	Happy NT4.0	40mm	lime/white/lime	200m	4 014803 444707	1
17137LI	Happy NT4.0	40mm	purple/white/purple	200m	4 014803 444714	1
17137TU	Happy NT4.0	40mm	turquoise/white/turquoise	200m	4 014803 444721	1



Part no.	Width	Spool	Conduc-tors	<b>TLDmax</b> TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
17121	20mm	200m	4	0.22mm	0.33Ω/m	~150kg	13 000m	4 300m	8
17122	20mm	200m	4	0.22mm	0.33Ω/m	~150kg	13 000m	4 300m	8
17123	30mm	200m	6	0.22mm	0.22Ω/m	~220kg	14 000m	4 600m	6
17124	40mm	200m	8	0.20mm	0.2Ω/m	~260kg	14 500m	4 800m	4
17125	40mm	200m	8	0.20mm	0.2Ω/m	~260kg	14 500m	4 800m	4
17136HG	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17136LI	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17136TU	20mm	200m	4	0.22mm	0.33Ω/m	~130kg	13 000m	4 300m	8
17137HG	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4
17137LI	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4
17126TU	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	4

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

## Fence material and accessories

### Twines



Turbomax (0.080Ω/m) is 180 times more conductive than the standard quality (14.4Ω/m)!



**TLDmax** conductors for best conductivity and highest breaking strength



Monofilaments with highest UV protection



### TURBOMAX

- The high number of **TLDmax** conductors in all TURBOMAX twines
- The high number **TLDmax** conductors ensure a high energy flow and high conductivity
- Polyethylene monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 5 years warranty for UV stability



# TLD!

Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17140	TURBOMAX W6	6	white/black/white	200m	4 014803 171405	1
17140-400	TURBOMAX W6	6	white/black/white	400m	4 014803 437891	1
17140-1000	TURBOMAX W6	6	white/black/white	1000m	4 014803 437907	1
17141	TURBOMAX W9	9	white/black/white	200m	4 014803 171412	1
17141-400	TURBOMAX W9	9	white/black/white	400m	4 014803 437914	1
17141-1000	TURBOMAX W9	9	white/black/white	1000m	4 014803 437921	1
17142	TURBOMAX W12	12	white/black/white	200m	4 014803 171429	1
17142-400	TURBOMAX W12	12	white/black/white	400m	4 014803 437938	1
17142-1000	TURBOMAX W12	12	white/black/white	1000m	4 014803 437945	1



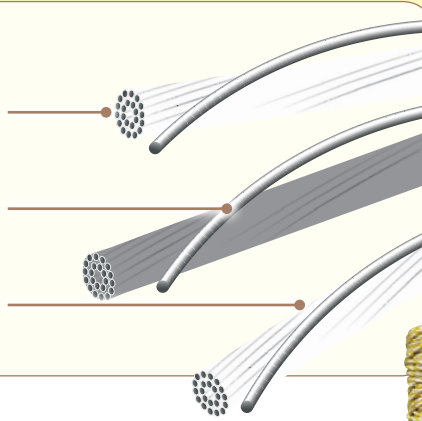
Part no.	Spool	Conductors	Resistance			Max rec. fence length		
						main fences	dry battery fences*	
17140	200m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	18
17140-400	400m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	8
17140-1000	1 000m	6	0.30mm	0.12Ω/m	~180kg	18 500m	6 100m	4
17141	200m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	18
17141-400	400m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	8
17141-1000	1 000m	9	0.25mm	0.11Ω/m	~200kg	19 000m	6 300m	4
17142	200m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	18
17142-400	400m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	8
17142-1000	1 000m	12	0.25mm	0.08Ω/m	~220kg	23 500m	8 000m	4

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

Up to 42 times more conductive  
(0.35  $\Omega$ /m) than the standard quality  
(14.4  $\Omega$ /m)

Grouped **TLDmax** conductors for  
best conductivity

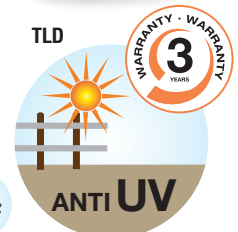
UV stabilized polyethylene  
monofilaments for best resistance



## RANGER TLDmax TECHNOLOGY

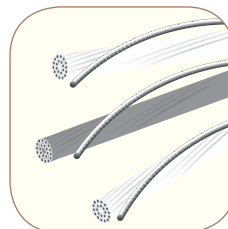
- The high number of **TLDmax** conductors in all RANGER twines ensure a good conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow and a high conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty

Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17143	RANGER W3-O	3	orange/grey/orange	200m	4 014803 171436	1
17143-400	RANGER W3-O	3	orange/grey/orange	400m	4 014803 437952	1
17143-1000	RANGER W3-O	3	orange/grey/orange	1000m	4 014803 437969	1
17144	RANGER W3-W	3	orange/grey/orange	200m	4 014803 171443	1
17144-400	RANGER W3-W	3	orange/grey/orange	400m	4 014803 437976	1
17144-1000	RANGER W3-W	3	orange/grey/orange	1000m	4 014803 437983	1



## RANGER FLUO TLDmax TECHNOLOGY

- The tape Ranger Fluo is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woods
- High number of **TLDmax** conductors for best conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17145	RANGER FLUO W3	3	fluorescent acting	200m	4 014803 171450	1
17145-400	RANGER FLUO W3	3	fluorescent acting	400m	4 014803 438058	1



Part no.	Spool	Conductors:	Resistance		Max rec. fence length			
					main fences	dry battery fences*		
17143	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17143-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18
17143-1000	1 000m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	4
17144	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17144-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18
17144-1000	1 000m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	4
17145	200m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	32
17145-400	400m	3	0.25mm	0.35 $\Omega$ /m	~160kg	12 000m	4 000m	18

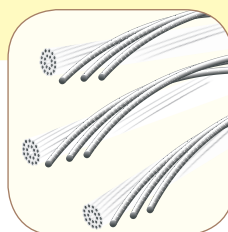
\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

# Fence material and accessories

## Twines

### FARMER

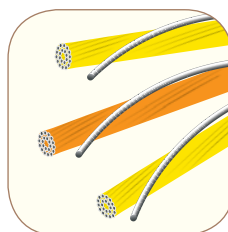
- Polywire standard qualities for short and medium sized fence lengths with increased number of strong monofilaments for higher breaking strength
- More special features are:
  - Twice as many monofilaments as a standard quality.
  - Monofilaments with highest UV protection
  - Best breaking strength
- Colour: white and yellow/orange/yellow



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
15346	FARMER W3-W	3	white	250m	4 014803 153463	1
15282	FARMER W6-W	6	white	250m	4 014803 152824	1
15283	FARMER W6-W	6	white	400m	4 014803 152831	1
15347	FARMER W9-W	9	white	250m	4 014803 153470	1
15277	FARMER W9-W	9	white	400m	4 014803 152770	1
15345	FARMER W3-O	3	yellow/orange/yellow	250m	4 014803 153456	1

### TRAPPER

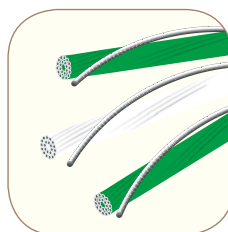
- For short fences only
- Colour: yellow/orange/yellow



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
15567	TRAPPER W3	3	yellow/orange/yellow	250m	4 014803 155672	1
15849	TRAPPER W3	3	yellow/orange/yellow	500m	4 014803 158499	1

### GREEN power-line TLDmax

- The twines of the Green power-line are especially practical for long fences, because of the TLDmax conductors
- Because of the green colour, the twine fits perfectly to the landscape
- Very visible because of the white identification strand
- Grouped TLDmax conductors for best conductivity and highest strengths
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
17146	GREEN POWER W3	3	green	200m	4 014803 171467	1

Part no.	Spool	Con- ductors	Diametre stainless steel	TLDmax	Resistance		Max rec. fence length		
							main fencers / 12V*	dry battey fencers*	
15345	250m	3	0.18mm	—	9.99Ω/m	~50kg	3000m	900m	32
15346	250m	3	0.18mm	—	9.99Ω/m	~50kg	3000m	900m	32
15282	250m	6	0.18mm	—	4.98Ω/m	~60kg	3500m	1 100m	32
15283	400m	6	0.18mm	—	4.98Ω/m	~60kg	3500m	1 100m	18
15347	250m	9	0.18mm	—	3.33Ω/m	~70kg	4500m	1 500m	20
15277	400m	9	0.18mm	—	3.33Ω/m	~70kg	4500m	1 500m	18
15567	250m	3	0.15mm	—	14.4Ω/m	~30kg	1800m	500m	50
15849	500m	3	0.15mm	—	14.4Ω/m	~30kg	1800m	500m	24
17146	200m	3	—	0.25mm	0.35Ω/m	~160kg	12 000m	4 000m	32

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

## Dederon wire „Original Steuer“

- Plastic core 1.4 mm diameter.
- Entwined with 2 special conductors.
- Galvanized metal wire.

1000m

Part no.	EAN	Piece
15833S	4 014803 426420	1

500m

Part no.	EAN	Piece
15531S	4 014803 426413	1



## Horilitze horizont quality

- Plastic core 1.4 mm diameter.
- Entwined with 2 special conductors.
- Galvanized metal wire.

1000m

Part no.	EAN	Piece
15833	4 014803 158338	1



## RANGER TWIST

- Plastic core out of 24 plastic monofilaments
- Wrapped with a special conductor
- Made of galvanized steel wire

Part no.	EAN	Piece
14986	4 014803 149862	1



## EQUIWIRE

- Galvanized steel wire with a diameter of 2.5mm
- UV-protected polyethylene casing
- Protects the galvanized steel wire inside against weather impact
- Protects your animal by contact with the fence
- The electrically conducting plastic surrounds the inside steel wire. The impulse energy of the steel wire is conducted to the surface area of the EQUIWIRE

- Good visibility
- Easy installation
- High performance



Part no.	Product	Conductors	Spool	EAN	Piece
14900	EQUIWIRE	1	400m	4 014803 149008	1

Part no.	Spool	Conductors	HIGH TENSILE	Diametre stainless steel	Resistance		Max rec. fence length		
							main fences	main fences	
15833	1000m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
15833S	1000m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
15531S	500m	2		0,5mm	0,35Ω/m	~30kg	12 000m	4 000m	1
14986	20m	1		0,5mm	0,7Ω/m	~30kg	6 000m	2 000m	1
14900	400m	3	1	–	0,04Ω/m	~500kg	30 000m	11 000m	1

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

### HIGHLIGHT



## High tensile wire GALVADUR

- Special wire with a thick galvanized zinc/aluminum long time protection (95% zinc and 5% aluminium)
- High tensile wire has four times longer life compared to normal steel wires



### GALVADUR 2.5, 625m (= 25kg), 2.5mm ø

Part no.	EAN	Piece
15945	4 014803 159458	1

### GALVADUR 1.6, 315m (= 5kg), 1.6mm ø

Part no.	EAN	Piece
15904	4 014803 159045	1

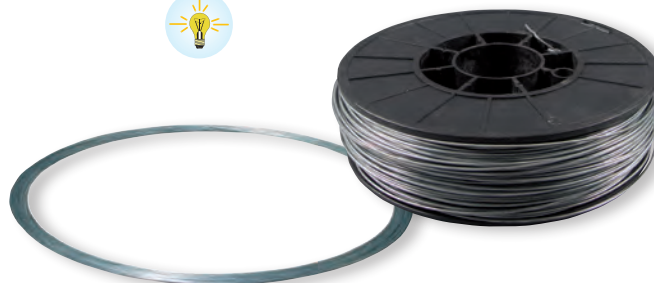


## Steel wire

- Galvanized
- 1.8mm ø



Part no.	EAN	Piece
15036	4 014803 150363	1
15036S	4 014803 436689	1



## Stranded steel wire

- Galvanized
- 1.5mm ø



### Ring 200m

Part no.	EAN	Piece
15009	4 014803 150097	1

### Spool, 200m

Part no.	EAN	Piece
14134	4 014803 141347	1

### Spool, 400m

Part no.	EAN	Piece
14134-400	4 014803 438102	1



Part no.	Spool	Con- ductors	Diametre stainless steel	Resistance		Max rec. fence length		
						main fences / 12V*	dry battey fences*	
15945	625m	1	2,5mm	0,04Ω/m	~500kg	30 000m	11 000m	1
15904	315m	1	1,6mm	0,06Ω/m	~200kg	26 000m	8 700m	1
15036	250m	1	1,8mm	0,05Ω/m	~500kg	28 000m	9 400m	5
15036S	250m	1	1,8mm	0,05Ω/m	~500kg	28 000m	9 400m	5
15009	200m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1
14134	200m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1
14134-400	400m	7	0,5mm	0,12Ω/m	~200kg	18 500m	6 100m	1

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



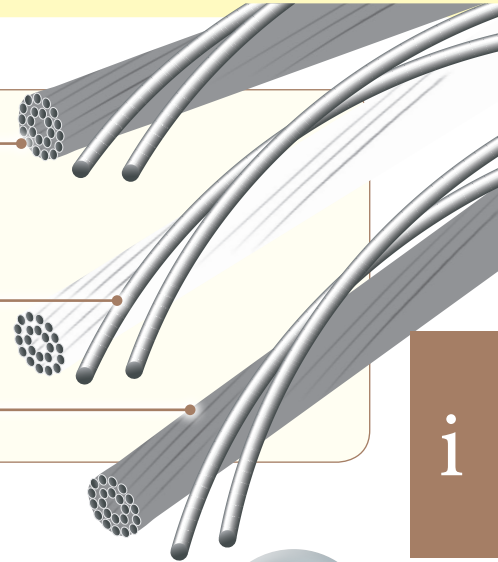
Up to 84 times more conductive  
( $0.17\Omega/\text{m}$ ) than the standard quality  
( $14.4\Omega/\text{m}$ )!



Grouped **TLDmax** conductors for best  
conductivity and highest breaking strength



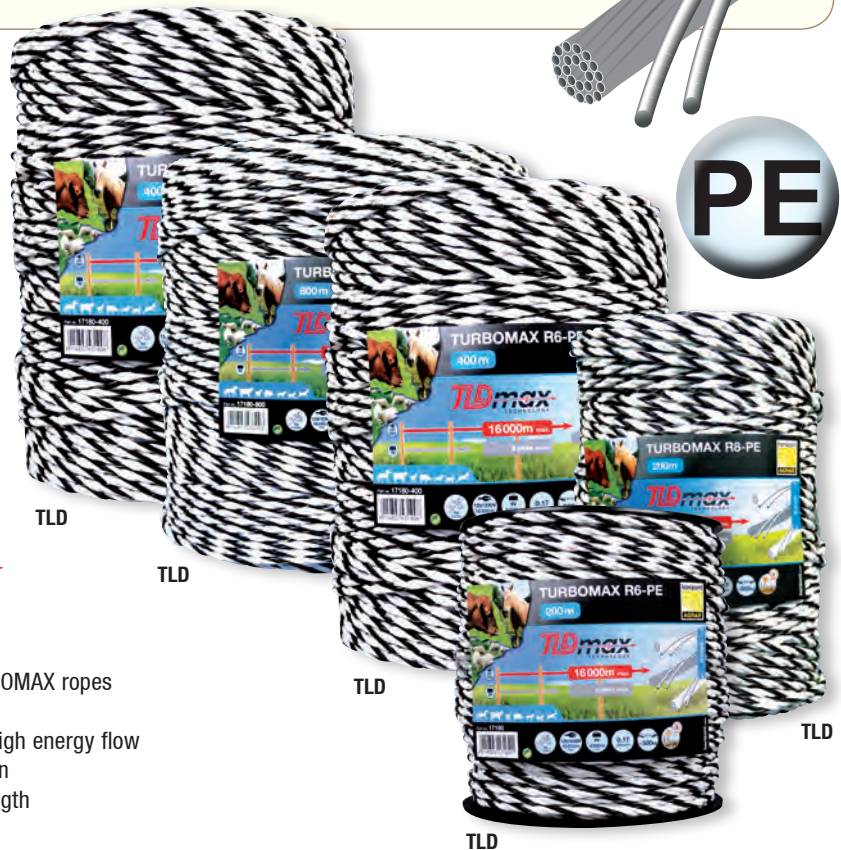
UV stabilized polyethylene  
filaments for best resistance



PE

**TLDmax**  
TURBOMAX TECHNOLOGY

- The high number of **TLDmax** conductors in all TURBOMAX ropes ensure a high conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow
- Polyethylene monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 5 years warranty
- Colour: white with black identification strand



Part no.	Product	Ø	Spool	EAN	Piece
17180	TURBOMAX R6-PE	6mm	200m	4014803471801	1
17180-400	TURBOMAX R6-PE	6mm	400m	4014803431998	1
17180-800	TURBOMAX R6-PE	6mm	800m	4014803438003	1
17181	TURBOMAX R7-PE	7mm	200m	4014803471818	1
17181-400	TURBOMAX R7-PE	7mm	400m	4014803438287	1



PE



Part no.	Spool	Conduc-tors	Resistance		Max rec. fence length			
					main fences	dry battery fencers*		
17180	200m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	8
17180-400	400m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	3
17180-800	800m	6	0.25mm	0.17Ω/m	~500kg	16 000m	5 300m	1
17181	200m	6	0.25mm	0.17Ω/m	~600kg	16 000m	5 300m	8
17181-400	400m	6	0.25mm	0.17Ω/m	~600kg	16 000m	5 300m	3

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.

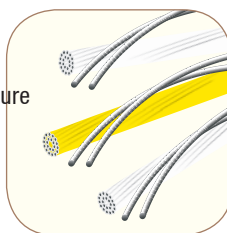


## Fence material and accessories

### Ropes

#### RANGER TLDmax TECHNOLOGY

- The high number of **TLDmax** conductors in all TURBOMAX ropes ensure a high conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty
- Colour: white with yellow identification strand



TLD

TLD



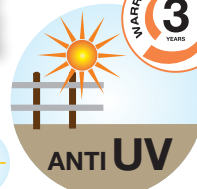
Part no.	Product	ø	Spool	EAN	Piece
17182	RANGER R6	5–6mm	200m	4 014803 171825	1
17182-400	RANGER R6	5–6mm	400m	4 014803 438010	1

#### RANGER FLUO TLDmax TECHNOLOGY

- The rope RANGER FLUO is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woods
- High number of **TLDmax** conductors for safety and highest conductivity
- Monofilaments with highest UV protection
- Polyethylene monofilaments for highest tensile strength
- 3 years warranty



TLD



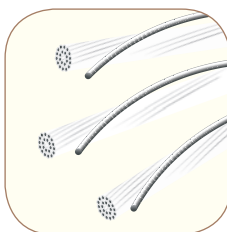
PE



Part no.	Product	Conductors	Colour	ø	Spool	EAN	Piece
17184	RANGER FLUO R6	6	fluorescent	6mm	200m	4 014803 171849	1

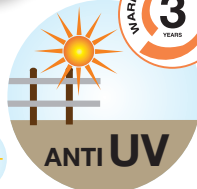
#### RANGER FLEX W3 and W4

- The electrical rope with braided monofilaments
- RANGER FLEX W3 monofilaments are braided in a 3mm skin, RANGER FLEX W4 in a 4mm skin
- The rope has much more elasticity than other ropes
- With stainless steel for highest breaking strength and tinned copper for best conductivity



TLD

TLD



PE



Part no.	Product	ø	Spool	EAN	Piece
14395	RANGER FLEX W3	3mm	300m	4 014803 143952	1
14396	RANGER FLEX W3	3mm	500m	4 014803 143969	1
14157	RANGER FLEX W4	4mm	200m	4 014803 141576	1
14158	RANGER FLEX W4	4mm	500m	4 014803 141583	1

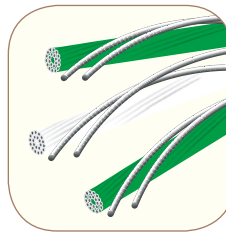
Part no.	Spool	Conductors	Diameter stainless steel	Tinned copper	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
								main fences	dry battery fences*:	
17182	200m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	8
17182-400	400m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	3
14184	200m	6	–	–	0.22mm	0.22Ω/m	~350kg	14 000m	4 600m	8
14395	300m	3	0.16mm	0.20mm	–	0.59Ω/m	~40kg	10 000m	3 300m	16
14396	500m	3	0.16mm	0.20mm	–	0.59Ω/m	~40kg	10 000m	3 300m	10
14157	200m	4	0.16mm	0.20mm	–	0.55Ω/m	~110kg	10 500m	3 500m	10
14158	500m	4	0.16mm	0.20mm	–	0.55Ω/m	~110kg	10 500m	3 500m	6

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



## GREEN power-line R6 TLDmax TECHNOLOGY

- The twines of the Green power-line are especially practical for long fences, because of the **TLDmax** conductors
- Because of the green colour, the twine fits perfectly to the landscape
- Very visible because of the white identification strand
- The high number of **TLDmax** conductors ensure a high energy flow
- Monofilaments with highest UV protection
- Plastic monofilaments for highest tensile strength
- 3 years warranty



TLD

TLD



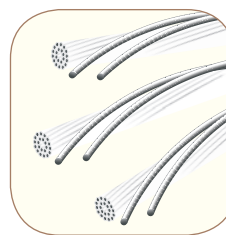
ANTI UV



Part no.	Product	Conductors	Colour	Ø	Spool	EAN	Piece
17183	GREEN-POWER R6	6	white	5-6mm	200m	4014803171832	1
17183-400	GREEN-POWER R6	6	white	5-6mm	400m	4014803438027	1

## FARMER

- For short fences only
- Colour: white



Part no.	Product	Conductors	Colour	Ø	Spool	EAN	Piece
153372	FARMER R6 200	6	white	6mm	200m	4014803438034	1
153372-400	FARMER R6 400	6	white	6mm	400m	4014803438041	1

Part no.	Spool	Conductors	Diameter stainless steel	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fences*	
153372	200m	6	0.20mm	—	4.05Ω/m	~250kg	4000m	1300m	8
153372-400	400m	6	0.20mm	—	4.05Ω/m	~250kg	4000m	1300m	3
17183	200m	6	—	0.22mm	0.22Ω/m	~350kg	14000m	4600m	8
17183-400	400m	6	—	0.22mm	0.22Ω/m	~350kg	14000m	4600m	3

\* Rec. fence length to be reduced to 50% with medium vegetation growth and to 20% with heavy vegetation growth. Icon description please see cover.



## Guardian Hotline Electric Fencing

HIGHLIGHT  
★★★★★



NEW



## FENCE BUSTER™

Combining comfort with safety

Turnout rugs that work with electric fencing

Guardian's FENCE BUSTER™ turnout rug is designed to work with electric fencing to prevent escapes. The chest and neck areas of our patented Fence Buster rugs have the benefit of integrated panels designed to instantly transfer the pulse from an electric fence directly through to the inside of the rug; so your horse will feel the same effect from the electric fence as they would if not wearing a rug.

Normal rugs can make an electric fence ineffective as they insulate the horse from the fence. This patented product has been designed so that when the horse makes contact with an electrified fence, the shock bypasses the fabric and the shock from the electric fence is instantly transferred to the horse. (see step 3).

### How it Works Turnout rug: Step by step guide



#### Step 1:

The outer layer of the chest panel makes contact with an electrified fence.



#### Step 2:

The shock is transferred to the inner surface of the inside strap



#### Step 3:

The inside strap is in contact with the horse at the shoulder, so the horse feels shock from the fence

### Benefits

#### Electric fence panels in the rug & neck cover

This means if your horse walks into the fence, leans over or ducks under – the shock from the fence will be instantly felt by the horse the very instant they make contact with the fence.

#### 1680D Ballistic polyester outer

This strong 1680Denier weave provides ultimate strength and durability.

#### Teflon coated

The Teflon coating helps water to bead off the fabric instead of soaking in. This means in lighter rain the rug will not absorb the water – it will simply run off – and after heavy rain the Teflon will speed up the drying process and prevent the rug wetting out. If you re-proof your rugs once a year, this will regenerate the Teflon performance to give you perfect weather protection year after year.

#### 250g throughout rug & neck cover

A snug 250 filling throughout the rug and neck cover will keep your horse warm and cosy. The rug is designed so you can layer up multiple rugs underneath. The special strap inside will always be in contact with the horse – so you can ensure the full effect from your electric fence – even with 2 or more rugs on.

#### Breathable anti rub 190T Nylon lining

A soft breathable nylon lining providing comfort

#### Rip-stop chest & neck cover

The Fence Buster has rip-stop chest and neck electric fence panels – for that added touch of durability.

#### Removable rear leg straps

If you prefer a fillett strap to leg straps, simply remove one leg strap altogether, and use the other leg strap as a fillett strap.

#### Quick snap & adjustable chest closure

Quick snap chest clips for ease of fitting – also fully adjustable buckles to ensure the best fit for narrow and broad chested horses.

#### Extra large tail guard

The extra large tail flap for all round protection from the elements.

#### Taped seams

The main seams are taped to ensure no seeping.

## Fence Buster™ Turnout rug, removable neck cover and liner

- Electric fence panels in the rug & neck cover
- 1680D Ballistic polyester outer
- Teflon coated
- 250g throughout rug and neck cover
- Breathable anti rub 190T Nylon lining
- Rip-stop chest & neck cover
- Removable rear leg straps
- Quick snap & adjustable chest closure
- Extra large tail guard
- Taped seams
- Fleece wither relief pad
- Cross surcingle

Colour: burgundy

Part no.	Total length	EAN	Piece
47RUG250BNL-59	175cm / 5FT9IN	5 021385 4008998	1
47RUG250BNL-6	183cm / 6FT	5 021385 4009001	1
47RUG250BNL-63	191cm / 6FT3IN	5 021385 4009018	1
47RUG250BNL-66	198cm / 6FT6IN	5 021385 4009025	1
47RUG250BNL-69	206cm / 6FT9IN	5 021385 4009032	1



- Liner rug
- 420d polyester Outer
- Stain resistant
- 150g filling

## Fence Buster™ Turnout rug and removable neck cover

- Electric fence panels in the rug & neck cover
- 1680D Ballistic polyester outer
- Teflon coated
- 250g throughout rug and neck cover
- Breathable anti rub 190T Nylon lining
- Rip-stop chest & neck cover
- Removable rear leg straps
- Quick snap & adjustable chest closure
- Extra large tail guard
- Taped seams
- Fleece wither relief pad
- Cross surcingle

Colour: burgundy

Part no.	Total length	EAN	Piece
47RUG250BN-5	152cm / 5FT	5 021385 4008905	1
47RUG250BN-53	160cm / 5FT3IN	5 021385 4008912	1
47RUG250BN-56	168cm / 5FT6IN	5 021385 4008929	1
47RUG250BN-59	175cm / 5FT9IN	5 021385 4008936	1
47RUG250BN-6	183cm / 6FT	5 021385 4008943	1
47RUG250BN-63	191cm / 6FT3IN	5 021385 4008950	1
47RUG250BN-66	198cm / 6FT6IN	5 021385 4008967	1
47RUG250BN-69	206cm / 6FT9IN	5 021385 4008974	1
47RUG250BN-7	213cm / 7FT	5 021385 4008981	1

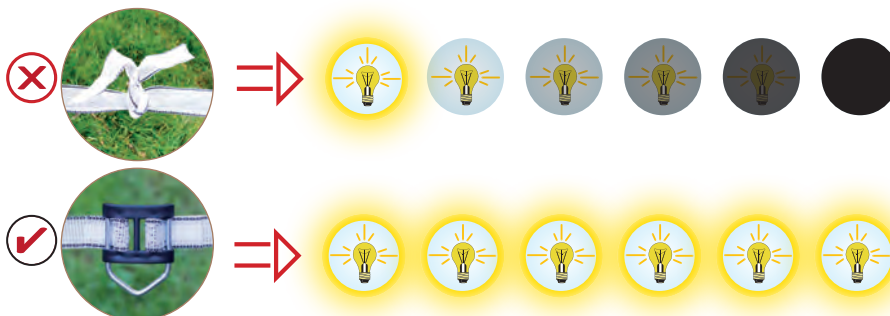


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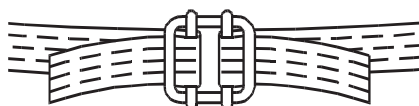
## Never knot your tape!

- Connectors guarantee a non-disturbed energy flow
- Knots and other bad connections disturb the energy flow
- The conductive material at multistranded fences will be connected in regular distances



## Tape connectors Aluminium

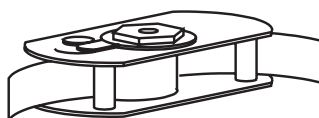
- Joins tapes up to 40mm simply and reliably
- Simple restraining possible



Part no.	Product	EAN	Piece
15163C	for tapes up to 20mm, aluminium	4 014803 405630	10
15164C	for tapes up to 40mm, aluminium	4 014803 405647	5

## Tape strainer Aluminium for tapes up to 20mm

- Ideal for tensioning tapes
- With just a few turns the tape is firmly tensioned and can be loosened again the other way round

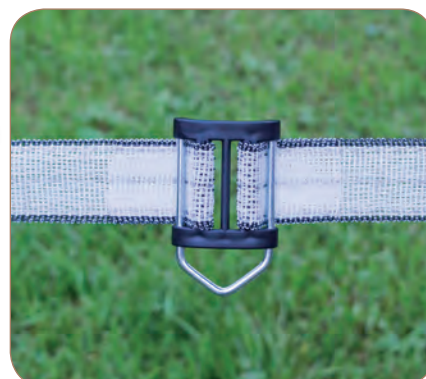


Part no.	Product	EAN	Piece
15455C	for tapes up to 20mm	4 014803 405715	2



## Tape connector 40mm

- Easy to apply to the tape
- Fits to all usual tapes
- Continuous metal support
- Sturdy tape connector with metal supports out of one piece supported by unbreakable plastic



Part no.	EAN	Piece
14987C	4 014803 149879	5

HIGHLIGHT  
★★★★★



## Tape connector 20mm

- Easy to apply to the tape
- Fits to all usual tapes
- Continuous metal support
- Sturdy tape connector by metal supports out of one part
- Unbreakable plastic

Part no.

14988C

EAN



Piece



HIGHLIGHT  
★★★★★



## Tape connection for gate handles

- Tape is easy and safe to use
- Fits to all usual tapes
- Galvanized metal support
- Sturdy tape connector with metal supports out of one piece supported by unbreakable plastic

Part no.

14989C

EAN



Piece



## Tape connection cable with 2 screw clips for tape up to 40mm

- This tape connection cable with clips will connect 2 tapes up to 40mm running parallel or bridge two tape ends
- Cable length 50cm
- Screw fixing allows for very firm connection

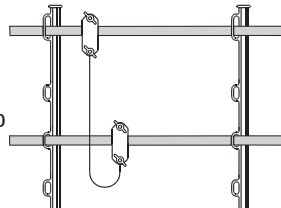
Part no.

10446C

EAN



Piece



stainless steel

## Wire connector

- For a secure and durable connection of polywires
- For connections from twines to gate handles

galvanized

Part no.

15063C

EAN



Piece



stainless steel

Part no.

14045C

EAN



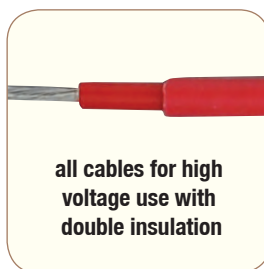
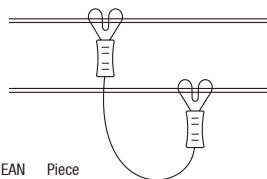
Piece



stainless steel

## Wire connection cable with 2 heart clips

- Cable length 50cm
- For vertical connections of wires



Part no.

**10440C**

EAN

Piece



## Wire joining clamp

- For securely connecting steel wires.
- To join two ends and for making vertical connections



Part no.

**15526C**

EAN

Piece



## Wire connection screw

- Galvanized connection screw for connecting several iron- and steel wires



Part no.

**14197C**

EAN

Piece



## Wire connection screw with plastic coating

- Connection screw with plastic coating and nut for connecting several iron- and steel wires



Part no.

**14356**

EAN

Piece



## Griple wire joiner

- For 1mm – 3.25mm wire. Ensures a lasting connection between two wire ends
- Suitable also for end assemblies at corner posts



**For wire 2 – 3.25mm**

Part no.

**15960**

EAN

Piece



**For wire 1 – 2mm**

Part no.

**15967**

EAN

Piece



## Gripler tool

- Suitable for griple wire joiner
- With this tool up to 400kg tension can be put on the wire
- Adjustment of the tension through measurement



Part no.

**15962**

EAN

Piece





## Wire and rope strainer



i



### Wire- and rope strainer

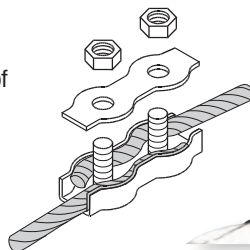
- Suitable for wires, ropes up to 6mm diameter and tapes up to 13mm diameter
- Easy to apply
- Easy straining is possible at any time
- The wire or the rope does not have to be cut

Part no.	EAN	Piece
14991	4 014803 149916	2



### Rope connector

- For a secure and durable connection of electrifiable ropes
- To connect ropes on gate handles
- To connect the rope on start and ends insulators



#### 4–6mm ø, galvanized

Part no.	EAN	Piece
15483C	4 014803 405746	5

#### 7–8mm ø, galvanized

Part no.	EAN	Piece
15363C	4 014803 408396	3

#### 4–6mm ø, stainless steel

Part no.	EAN	Piece
15506C	4 014803 408426	5

#### 7–8mm ø, stainless steel

Part no.	EAN	Piece
14053C	4 014803 140531	3



## Rope connector super

- Designed for easy connection of rope ends. (ø 5–6mm).
- Ensures excellent conductivity across the joint
- To connect ropes on gate handle
- To connect the rope on start and ends insulators

stainless  
steel



### 7–8mm ø, stainless steel

Part no.	EAN	Piece
14054C	4 014803 140548	5

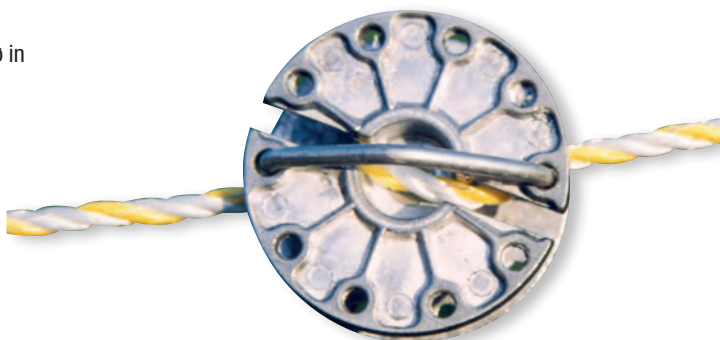
### 5–6mm ø, galvanized

Part no.	EAN	Piece
15314C	4 014803 405913	5

## Rope strainer 8mm ø

- Suitable for all types of steel wire and electrified rope up to 8mm ø in permanent or temporary fences
- Complete with arrester lock
- Allows insertion of wire and rope without cutting the ends

**Attention: Ideally suited to wire from 1.0 – 2.8mm ø**



Part no.	EAN	Piece
15937C	4 014803 405463	2

Part no.	EAN	Piece
15937–25	4 014803 413192	25

## Connection cable with rope clamp

- Connection cable with two rope clamps for optimum mechanical and electrical connection between two electrical ropes
- For ropes up to 6mm ø
- Length of the cable: 50cm



stainless  
steel

### 7–8mm ø, stainless steel

Part no.	EAN	Piece
10597C	4 014803 105974	1

### 5–6mm ø, galvanized

Part no.	EAN	Piece
10596C	4 014803 105967	1

# Insulators

HIGHLIGHT



Unique  
Insulator with perfect  
isolation!  
> p.107

Insulators lead the conductive material around the area fenced in. A high isolation capacity is necessary to avoid an unintentional loss of energy. Please find the right insulators for your fence on the following pages.



HIGHLIGHT



## Fixating

Suitable for tapes, twines and ropes. The conductor material is fixed.

> see.p 104



HIGHLIGHT



## Helpful device

To screw in the insulators with a cordless drill.

> see p. 109



HIGHLIGHT



## Distance

Keep conductor material at a distance.

> see p. 112

## Chapter

## Page

**Insulators I** product guide I  
overview 100  
– 101

**Insulators I** for tapes 102  
– 105

**Insulators I** for twines 106  
– 109

**Insulators I** screw in aid 109

**Insulators I** for wires 110

**Insulators I** for ropes 111

**Insulators I** distance insulators  
I corner insulators 112  
– 114

**Insulators I** supplementary  
insulators 115  
– 118



	Part no.	Description	Suitable for				Suitable as		Fixation		Fence material is		Support		UV-stability	Page
			tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance insulator	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short		
Tape																
	15843	TURBOMAX I–40 PLUS	40	8	4		●	●		5	●				●	102
	14161	EQUIBLOCK	40		4		●			5	●				●	103
	15373	RANGER I–40 FIX	40				●			5	●				●	103
	15388	RANGER IS–40 FIX	40				●		6		●		●		●	103
	15682	COMBI IS–40	40	8	4		●	●	6			●		●	●	104
	15460	RANGER I–40	40				●			5		●			●	104
	14990	RANGER I–40FIX PLUS	40	8			●			5	●				●	104
	15571	CORNER I–40	40	8	4		●			5		●			●	105
	15572	CORNER I–40 PLUS	40					●		5	●				●	105
	15555	RANGER IS–20	20		4		●		5			●			●	103
Twine																
	15370	RANGER IS–L	13		4		●	●	6			●	●		●	106
	15461	RANGER IS–S	13		4		●	●	6			●		●	●	106
	15364	FARMER IS–L	13		4		●	●	5.3			●		●	●	107
	140271	GIGANT IS–S	13		4		●	●	6			●		●	●	107
	14984	FARMER PND	13		4		●		8			●			●	107
	15275	FARMER IS–S	13		4		●		5.3			●		●	●	108
	14176	TRAPPER IS–S	13		4		●		5.3			●		●	●	108
	15485	RANGER IS–W PC			3		●	●	6		●	●	●		●	108
	15275	FARMER IS–W			3		●		5.3		●	●	●		●	108
	153021	Nailway insulator			2		●			Nail		●			●	108
	15495	Bobbin insulator			2		●			Nail		●			●	109
	15457	Staple insulator			2		●			Staple		●			●	109
Wire																
	15929	HOT STOP I–20	20	8		2.5	●	●		5		●			●	110
	14164	Permanent fence insulator Economy		6		2.5	●	●		5		●			●	110
	14165	Wire insulator Economy		6	4	2.5	●	●		5		●			●	110
	14933	Pin–Lock			4	2.5	●	●		5		●			●	110
Rope																
	15835	TURBOMAX IS–8	13	8	4		●	●	6			●		●	●	111
	14198	Insulator for rope standard	13	8	4		●		6			●		●	●	111
	14408	Insulator for rope	13	8	4		●			5		●		●	●	111
Distance insulators																
	14938	COMBI ISD–40	40	8	4		●		6			●		●	●	112
	15186	RANGER ISD–20	12		4		●		6			●		●	●	112
	15838	TURBOMAX ISD–8	13	8	4		●		6			●		●	●	112
	15073	TURBOMAX ISD–8 metric	13	8	4		●		M6			●		●	●	112
	15595	RANGER ISD	20		4		●		6			●		●	●	113
	14937	FARMER ISD	13		4		●		6			●		●	●	113
Corner insulators																
	15830	Corner insulator	40					●				●		●	●	144
	10012	CORNER IS–W		8	4			●	7			●		●	●	113
	15183	CORNER I–W			4			●		5		●			●	114

	Part no.	Description	Suitable for				Suitable as		Fixation		Fence material is		Support		UV-stability	Page
			tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance insulator	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short		
Strain insulators																
	15925	Porcelain				2.5	●	●			●	●				114
	14061	ABS				2.5	●	●			●	●			●	114
	15070	PP				2.5	●	●			●	●			●	114
	15194	Porcelain				2.5	●	●			●	●			●	114
Supplementary insulators																
	15059	Spare insulator			4		●					●			●	115
	15053	Spare insulator			4		●					●			●	115
	150511	Metal clip			4		●					●			●	115
	15415	Spare insulator	20		4		●					●			●	115
	15805	Splint insulator			4		●					●			●	115
	15293	Ring insulator			4		●					●			●	115
	14046	clip insulator for Fibreglass posts	13		4		●					●			●	117
	15129	IP-15		8	4		●					●			●	116
	15290	COMBI IP-15	13	6	4		●					●			●	116
	14969	Tape insulator	40		4		●					●			●	116
	15474	IP19	20		4		●					●			●	117
	14903	CLIP MASTER			4	2.5										117
	14922	Head insulator			4	2.5	●				●				●	117
	15480	Plastic loop	20	8	4		●					●			●	117

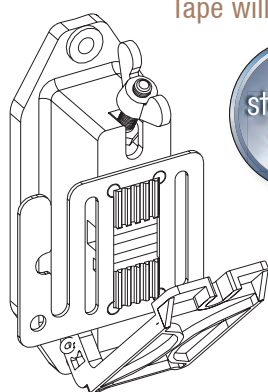
### Meaning of colours:



Ideally suited



Limited suitability



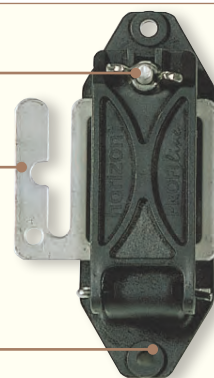
Tape will be fixed !



No risk of losing the screw as it is held in the housing by a nut

The connection plate can be used to attach a sub-division tape, also to connect to a gate handle or lead out cable

Holds up extremely tractive forces for electric fencing material



## TURBOMAX I-40 PLUS (with connection plate)

Part no. EAN Piece

15843C



## Connection plate (without picture)

Part no. EAN Piece

14874



## TURBOMAX I-40 (without connection plate)

Part no. EAN Piece

15837C



## horizont multi-purpose insulator

The following facts speak for our tape insulator TURBOMAX I-40 / I-40 PLUS:

- massive insulation body due to high material input
- fixation of tapes up to 40 mm
- fixation of ropes up to 8 mm
- connection plate (I-40 PLUS) for connection of tapes and twines
- ideal for the beginning of your fence or as an end insulator or 3-way insulator (I-40 PLUS)



As insulator for fence opening



As insulator with tape connection



As three-way insulator



As insulator with gate connection



As insulator for cross connection of tape with cable



Easy simple handling – one hand strains the tape, the other one fasten the screw

## EQUIBLOCK

The EQUIBLOCK insulator keeps the tape strained and safe in this insulator. EQUIBLOCK insulators are available in two different versions, with and without rubber inlay. Specially with the version with rubber inlay 20mm and 40mm tape is fixed and strained in the insulator. The insulator is closed with two plastic screws.

### Tape insulator EQUIBLOCK

- Screw in and nail on tape insulator for wooden and recycled posts
- Full plastic insulator for all tapes up to 40mm
- The tape is fixed in the insulator by the screws

Part no.		EAN	Piece
14161C		4 014803 141613	8
14161EI		4 014803 428929	30

UV



Tape will be fixed!



With rubber strip!



### Tape insulator EQUIBLOCK Plus

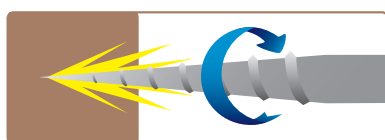
- Same insulator as 14161, but with additional rubber inlay. Thus the tape is protected and has longer life expectancy

Part no.		EAN	Piece
14162C		4 014803 141620	8

UV



Tape will be fixed!



## horizontal insulator backing with thread for wood

- Long and taper thread for easy installation
- Self-tapping thread for screwing – in easily
- Primary drilling and primary counterbore is not required
- Sharp thread edges for a secure fit
- Insulator backing is produced with specially coated steel

### RANGER I-40 FIX

- The special design allows secure fastening of the tape thus ensuring the required tape strain
- Can be nailed on or screwed in
- Big insulator area (drying surface) from tape to post

Part no.		EAN	Piece
15373C		4 014803 408402	12

UV



Tape will be fixed!



24.000 Volt



### RANGER IS-40 FIX

- Safe fixing of tape because of special process in the insulator
- Big insulator area (drying surface) from tape to post
- Support with wooden thread

With screw in support

Part no.		EAN	Piece
15388C		4 014803 408419	15

UV



Tape will be fixed!



24.000 Volt



### RANGER IS-20

- Wooden thread
- For tapes up to 20mm
- For ropes up to  $\varnothing$  4mm

Part no.		EAN	Piece
15555-25		4 014803 408365	25
15555C		4 014803 405814	25
15555EI		4 014803 002945	100

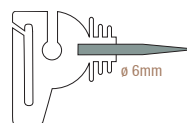
UV



## COMBI IS-40

- Short support
- Big drying surface
- Wooden thread
- For tapes up to 40mm
- For Twines and ropes up to 8mm ø

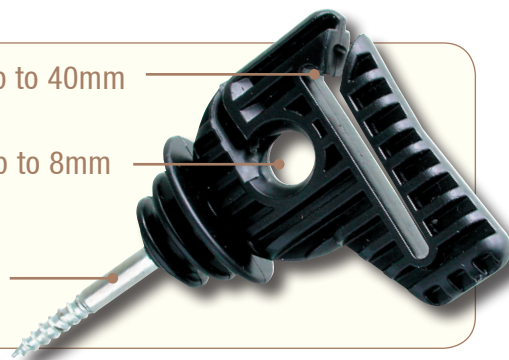
Part no.		EAN	Piece
15682		4 014803 156822	30
15390C		4 014803 153906	25
15390EI		4 014803 413147	80
15390EI-150		4 014803 426840	150



For tapes up to 40mm

For ropes up to 8mm

Easy to screw in



Allows free movement!



## COMBI IS-40 happy

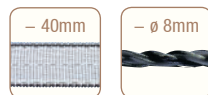
Part no.	Colour		EAN	Piece
15390HG-30	lime		4 014803 444646	30
15390LI-30	purple		4 014803 441966	30
15390TU-30	turquoise		4 014803 441942	30



## RANGER I-40

- Can be nailed on or screwed in
- For tapes up to 40mm
- For ropes up to 8mm ø

Part no.		EAN	Piece
15460-10		4 014803 408372	10
15460C		4 014803 405401	20



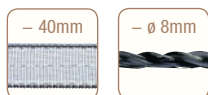
Allows free movement!



## RANGER I-40 FIX PLUS

- For screwing in or nailing on
- Can also fix with cable ties
- For tapes up to 40mm
- For wires and ropes up to 8mm ø

Part no.		EAN	Piece
14990		4 014803 149909	25
14990C		4 014803 446527	20
14990EI		4 014803 446534	120



Tape will be fixed!



## CORNER I-40

- Very suitable as a corner insulator
- For tape up to 40mm
- Also suitable for 40mm tapes without corner function
- Also suitable as standard insulator
- Screw in and nail on possible



UV



Allows free movement!



### INOX, with bolt, stainless steel

Part no. EAN Piece  
**15571C** 4 014803 405821 2

### with bolt, galvanized

Part no. EAN Piece  
**15297** 4 014803 152978 5

## CORNER I-40 PLUS

- Suitable for start- or end- insulator for tapes up to 40 mm
- Screw in and nail on possible



UV



Tape will be fixed!



### INOX, with bolt and buckle, stainless steel

Part no. EAN Piece  
**15572C** 4 014803 405838 2

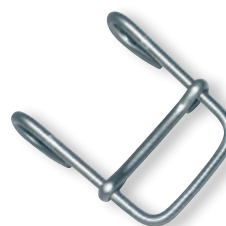
### with bolt and buckle, galvanized

Part no. EAN Piece  
**15299** 4 014803 152992 5

## Spare buckle for corner insulator

- to connect further tapes
- refined steel

Part no. EAN Piece  
**15296C** 4 014803 420480 4



## Tape insulator CORNER I-40 PLUS with tape strainer

- For tape up to 40mm
- Easy and secure straining
- With protection against twisting
- Smooth setup change in existing fence system
- Screw in and nail on possible



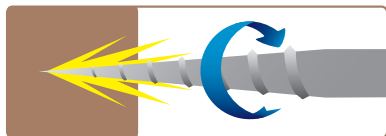
UV



Tape will be fixed!



Part no. EAN Piece  
**14163C** 4 014803 141637 2



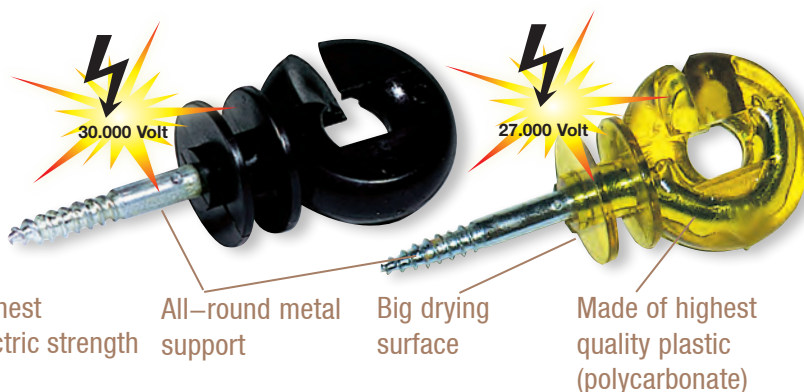
## horizont insulator backing with thread for wood

- Long and taper thread for easy installation
- Self-tapping thread for screwing in easily
- Primary drilling and primary counterbore is not required
- Sharp thread edges for a secure fit
- Insulator backing is produced with specially coated steel

### RANGER IS-L

- With short support
- Big drying surface
- Wooden thread

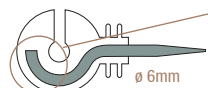
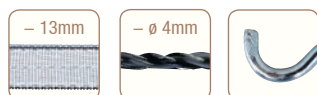
Part no.	EAN	Piece
15370	4 014803 153708	25
15370C	4 014803 421616	25
15370-50	4 014803 405340	50
15370EI	4 014803 002792	120
15370EI-240	4 014803 428554	240



### RANGER IS-L PC

- All-round metal support
- Big drying surface
- Wooden thread

Part no.	EAN	Piece
15341-25	4 014803 421630	25
15341C	4 014803 153418	25



### RANGER IS-L happy

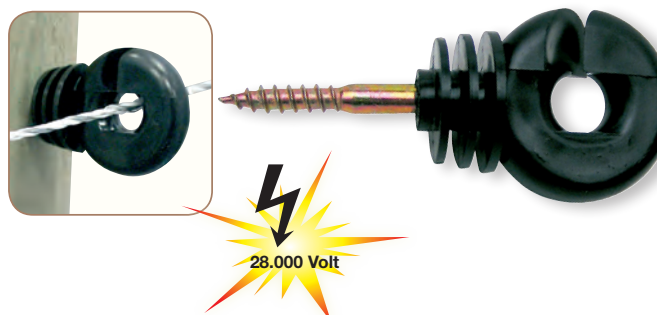
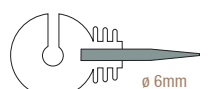
Part no.	Color	EAN	Piece
15370HG	lime	4 014803 444639	25
15370LI	purple	4 014803 441676	25
15370TU	turquoise	4 014803 441652	25



### RANGER IS-S

- With short support
- Big drying surface
- Backing and wooden thread

Part no.	EAN	Piece
15461	4 014803 154613	25
15461C	4 014803 421623	25
15461-50	4 014803 405357	50
15461EI	4 014803 002785	120



## FARMER IS-L

- All-round metal support
- Big drying surface
- Wooden thread

Part no.

EAN Piece

15364



50



## GIGANT IS-S

- With short support
- Extra large wire support
- Big drying surface
- Wooden thread

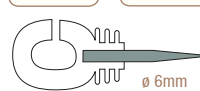
Part no.

EAN Piece

140271



25



HIGHLIGHT



## Isolator FARMER PND

- Full plastic body made out of one piece
- Very high insulation
- Easy handling and quick assembly
- Safe support through functional principal of pegs
- Universal use – fits all drills

Part no.

EAN Piece

14984

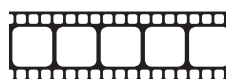
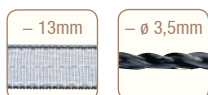


50

14984EI



150

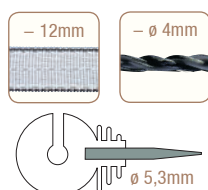


\*The bucket contains a universal 8mm HSS-drill attachment free of charge



## FARMER IS-S

- With short support
- Big drying surface
- Wooden thread



Part no.	Product	EAN	Piece
15275C	black	4 014803 420695	25
15275	black	4 014803 152756	50
15275-25	black	4 014803 420923	25
15275EI	black	4 014803 419859	100
15275GE	yellow	4 014803 417602	50
15275GE-25	yellow	4 014803 420916	25
15275RT	red	4 014803 421586	50



24.000 Volt



## Farmer-Box

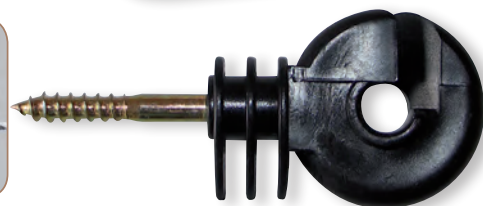
- Contains**
- 97 insulators 15275
  - 2 gate handles 15817SW
  - 1 screw aid 15357

Part no.	EAN	Piece
14957EI	4 014803 443441	100

## TRAPPER IS-S

- Backing and wooden thread

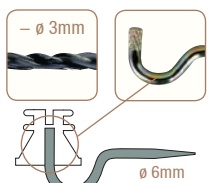
Part no.	EAN	Piece
14176	4 014803 141767	25
14176-50	4 014803 428752	50



## RANGER IS-W PC

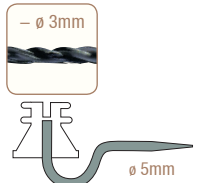
- Made of highest quality plastic material polycarbonate
- For wire up to 2mm
- Wooden thread

Part no.	EAN	Piece
15485	4 014803 154859	25
15485C	4 014803 421647	25



## Farmer IS-W

- For wire up to 2mm
- Wooden thread



Part no.	Product	EAN	Piece
15278	black	4 014803 152787	50
15278-25	black	4 014803 420947	25
15276	yellow	4 014803 152763	50
15276-25	yellow	4 014803 420930	25

UV

## Nailway insulator

with nail

Part no.	EAN	Piece
15302	4 014803 405838	50



### Hint!

Not recommended for use with strong 230V or 12V operated fencers.



## Bobbin insulator

with nail

Part no.	EAN	Piece
<b>15495-100</b>	4 014803 405968	100

with nail

Part no.	EAN	Piece
<b>15495C</b>	4 014803 420404	25



### Hint!

Not recommended for use with strong 230V or 12V operated fencers.



## Staple insulator

with nail

Part no.	EAN	Piece
<b>15457</b>	4 014803 154576	100



### Hint!

Not recommended for use with strong 230V or 12V operated fencers.

## Screw in aid universal

- For use with drill bites
- Suitable for all ring insulators, gate handle insulators and corner insulators (Corner IS-W)

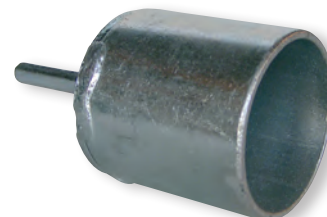
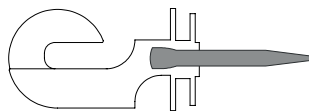
Part no.	EAN	Piece
<b>14965</b>	4 014803 149657	1
<b>14965C</b>	4 014803 444585	1



## Screw in aid for wire and rope insulators

- For use with drill bits
- Suitable for all Turbomax twines and rope insulators (see p. 111)

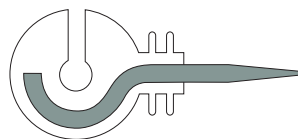
Part no.	EAN	Piece
<b>15349C</b>	4 014803 431721	1



## Screw in aid for ring insulators

- For use with drill bits
- Suitable for all ring insulators up to 16mm thickness (horizont types see p. 106 – 108)

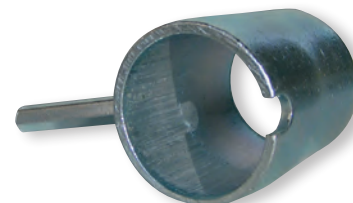
Part no.	EAN	Piece
<b>15357C</b>	4 014803 431738	1



## Screw in aid for slit insulators

- For use with drill bits
- Suitable for all slit insulators from horizont (see p. 108)

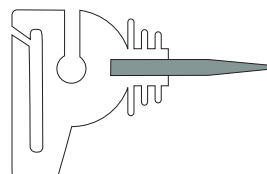
Part no.	EAN	Piece
<b>15358C</b>	4 014803 431714	1



## Screw in aid for COMBI IS-40

- For use with drill bits
- Suitable for all COMBI insulators from horizont (see p. 104)

Part no.	EAN	Piece
<b>14088C</b>	4 014803 431745	1



i



## HOT STOP I-20

- Extremely solid and UV-resistant insulator
- Ideal for high tensile wire GALVADUR
- For tapes up to 20mm and ropes up to 8mm Ø
- Insulator can be screwed in or nailed on
- The most powerful of its class



Part no.	EAN	Piece
<b>15929-10</b>		
<b>15929C</b>		
<b>15929EI</b>		



### Hint!

When assembling in curves the insulator has to be mounted with pressure in direction to the post.

## Permanent fence insulator Economy

- For wires and rope up to 8mm
- For fence tapes up to 12mm
- To be nailed or screwed onto posts



Part no.	EAN	Piece
<b>14164</b>		

## Wire insulator Economy

- For wires and rope up to 6mm
- For fence tapes up to 12mm
- To be nailed or screwed onto posts



Part no.	EAN	Piece
<b>14165</b>		

## Pin-Lock

- Insulator with wooden thread for twines up to 4mm and permanent fencing twines 1.6 and 2.5mm



Part no.	EAN	Piece
<b>14933-50</b>		

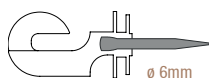


These insulators are unique twine and rope insulators. They are great in the hand and thus allow mounting without additional tools. The special feature is the construction of the insulator head. The fence material is inserted easily from above, so the fence material will not fall out at a later date. We offer this top product as a special insulator for electrical rope up to 8mm.



## TURBOMAX IS-8

- Special insulator for rope up to 8mm
- Big drying surface
- Very big distance from ropes to posts
- Short support
- With wooden thread



Applicable for corner insulators!

Part no.

15835C

EAN



Piece



## Insulator for rope standard

- Insulator for rope up to 8mm
- Short support
- With wooden thread



Part no.

14198

EAN



Piece



## Insulator for rope

- Insulator with wooden thread for ropes up to 8mm and tapes up to 12mm



Part no.

14408

EAN



Piece



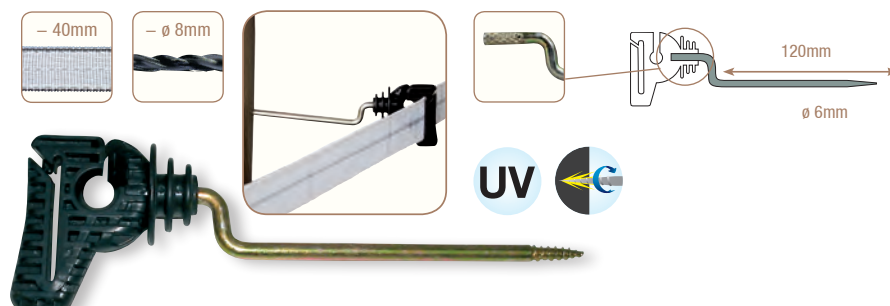
### COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**15828C**



### HIGHLIGHT



### COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**14938-10**



**14938C**



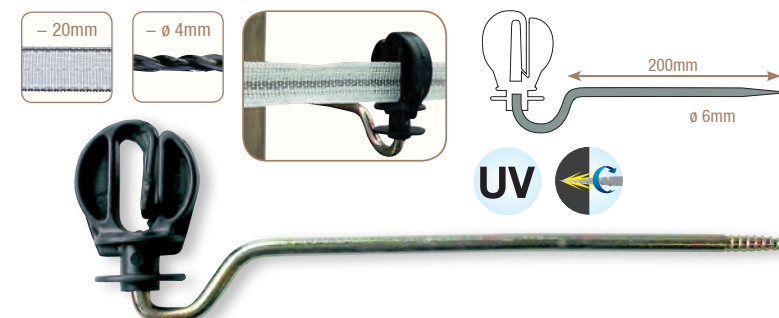
### RANGER ISD-20

- Ideal for fixation of tapes up to 20mm
- Tape cannot slip out
- Also suitable for twines
- Wooden thread

Part no.

EAN Piece

**15186**



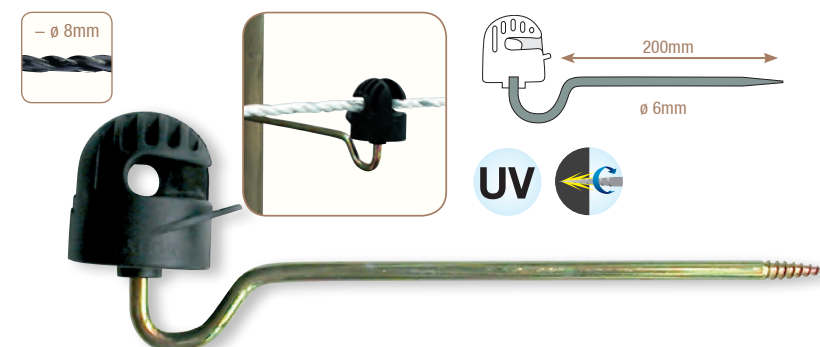
### TURBOMAX ISD-8

- For rope up to 8mm  $\phi$
- Wooden thread
- Big drying surface

Part no.

EAN Piece

**15838C**



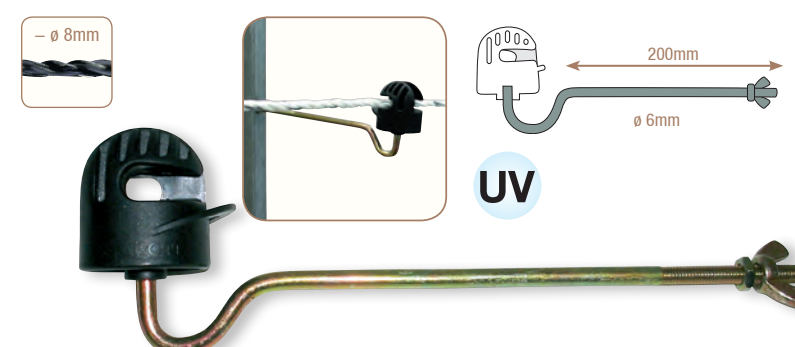
### TURBOMAX ISD-8 metric

- For rope up to 8mm  $\phi$
- Wooden thread
- With metric thread M6
- Big drying surface

Part no.

EAN Piece

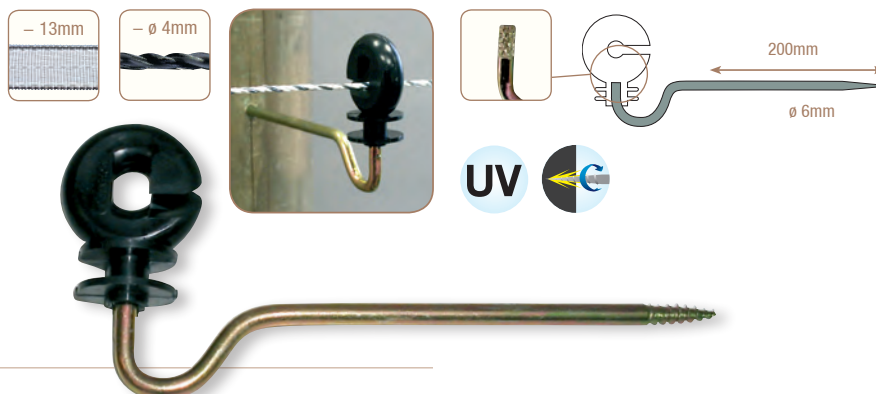
**15073C**



## RANGER ISD

- Large wire support
- Wooden thread
- High insulation

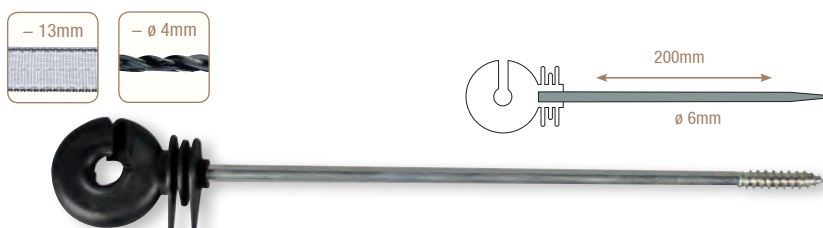
Part no. **15595** EAN **4 014803 155955** Piece **10**



## FARMER ISD

- Large wire support
- Wooden thread

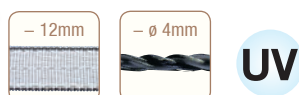
Part no. **14937** EAN **4 014803 149374** Piece **10**



## Flexibar 400, one-sided

Distance from post 40cm

Part no. **15318** EAN **4 014803 153180** Piece **10**



- Made from extruded plastic material therefore extremely long life
- Suitable for all wire, rope and tape
- Delivered with 20 staples



## Flexibar 600, two-sided

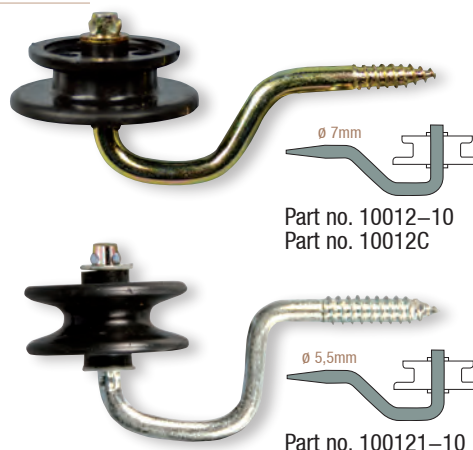
Distance from post each way 30cm

Part no. **15319** EAN **4 014803 153197** Piece **10**

## CORNER IS-W

- Wooden thread

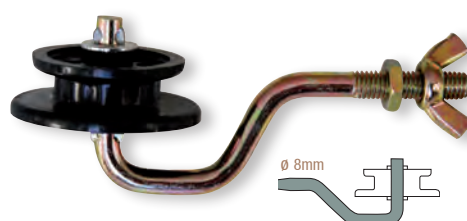
Part no. **10012-10** EAN **4 014803 422446** Piece **10**  
**10012C** EAN **4 014803 405371** Piece **5**  
**100121-10** EAN **4 014803 440679** Piece **10**



## Corner insulators „CORNER IS-W“

- With metric thread M8
- Thread length 30mm

Part no. **14166C** EAN **4 014803 141668** Piece **5**



## Insulators

### Corner and supplementary insulators

#### Corner insulator

- Big corner insulator for tapes up to 40mm
- Wooden thread



Part no.

EAN

Piece

15830



#### CORNER I-W

without nail

Part no.

EAN

Piece

15183-10



#### CORNER I-W

with nail

Part no.

EAN

Piece

14089C



#### Heavy duty corner knob made from porcelain

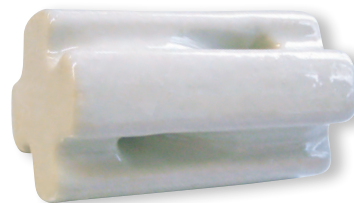
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

15925



#### Heavy duty corner knob ABS

- For rope up to 8mm ø
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

14061C



#### Heavy duty corner knob

- For rope up to 8mm ø
- For permanent fence wire GALVADUR

Part no.

EAN

Piece

15070



15070C



#### Heavy duty corner insulator

Part no.

EAN

Piece

15194-10



## Spare insulator

- Spare insulator for oval posts and round posts (see p. 135)



### with plastic ring for round post

Part no.	EAN	Piece
15059-50	4 014803 405326	50

### with plastic ring for oval post

Part no.	EAN	Piece
15053-50	4 014803 405302	50

### with metal ring for round post

Part no.	EAN	Piece
15060-50	4 014803 405333	50

### with metal ring for oval post

Part no.	EAN	Piece
15054-50	4 014803 405319	50



## Spare insulator with metal clip

- For all 8mm round- or metal posts (see p. 135)



Art.-Nr.	EAN	Einheit
150511	4 014803 432360	25



## Spare insulator plastic

- For all 8mm round- or metal posts (see p. 135)



Part no.	EAN	Piece
15415	4 014803 154156	25



### Splint insulator with metal splint

- For angle steel posts with 2mm and 3mm (see p. 135)

Part no.	EAN	Piece
<b>15805</b>		



### Ring insulator with metric thread

- For angle steel posts with 2mm and 3mm (see p. 135)
- With metric thread M6
- Thread length 30mm

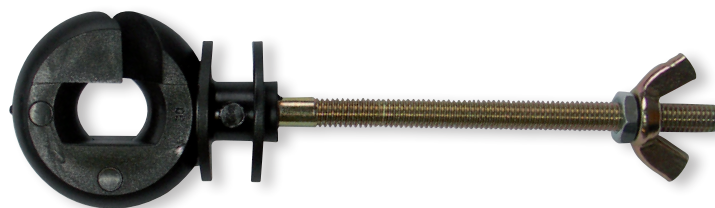
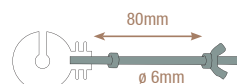
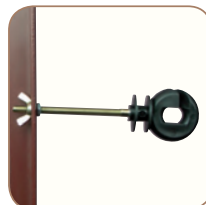
Part no.	EAN	Piece
<b>15293</b>		
<b>152931</b>		



### Ring insulator with metric thread



- Metal/thread length 80mm
- With metric thread M6
- For twines and tapes up to 12mm

Part no.	EAN	Piece
<b>14167</b>		



### Add on and clip insulator for Fibre glass posts

- Suitable on 10mm posts (see p. 132)
- For twines and tapes up to 12mm

Part no.	EAN	Piece
<b>14046-25</b>		
<b>14046C</b>		
<b>14046EI</b>		



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# ELECTRIC FENCING RANGE 2016

We are producing security and give impulses!



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## After-sales service

Our after-sales service is reliable, competent and fast. A defective device can be repaired uncomplicated at your supplier or by our team in Korbach.



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a. Find all products on our website. You can select our items easily and quick entering the item number. Our website is optimized for all end devices.



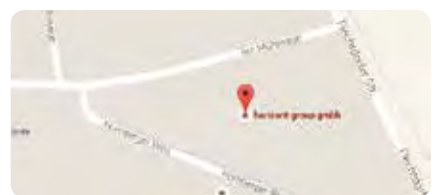
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hotline horizont Ltd  
Wharf Road  
Newton Abbot  
Devon, UK.TQ12 2DA  
UNITED KINGDOM

+44 (0) 16 26 / 3 31 – 1 88

sales@hotline-fencing.co.uk



hotline horizont Ltd  
PO Box 167,  
GLOUCESTER  
GL2 8YS  
UNITED KINGDOM

+44 (0) 14 52 / 3 00 – 4 50

+44 (0) 14 52 / 3 08 – 7 76

bramley@horizont.com  
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