

ELECTRIC FENCING RANGE 2018



We are producing security and give impulses!



horizont – your electric fencing professional presents:

Our new energiser ranger AN7000.

For battery and mains. Extend your grazing days with the environmentally conscious solar panel.

> please see page 25

Wolf defence

> more on pages 154 – 156



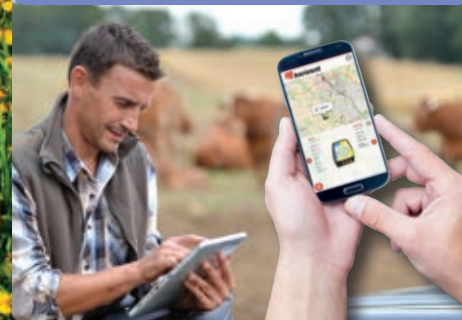
SMART post

> more on pages 138 – 139



SMART fencing

> more on page 16



HIGHLIGHT



Via App

New smart fencing app for effortless fence management. > page 16



Dieter Hake
Managing Director Animal Care

Dear customers,

Thanks to our new red company logo you are now able to recognize horizon even better than before! For the year 2018 we have developed further novelties and solutions for your animals.

Beside scores of product highlights which you can identify by their symbol (), I would like to highlight our YouTube channel as well as our Facebook page.

Our YouTube channel has many videos and is upgraded constantly. You will find numerous hints and tricks concerning the security of your animals.

Our Facebook page will keep you informed about horizon current news.

Due to its comfort and simple handling our GPS-energisers and our new SMARTposts convince electric fencing professionals as well as hobby livestock owners!

You can find further innovations to simplify your life and increase security within the next pages of our catalogue. I hope you will enjoy browsing through it!

Yours sincerely, Dieter Hake

Dieter Hake

A small selection of our highlights

To explore the highlights look for the  symbol throughout the catalogue!



HIGHLIGHT
★★★★★ 

trapper® AB2

All-round electric fence energiser for paddocks and short pastures.

> page 44

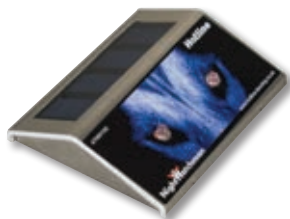


HIGHLIGHT
★★★★★ 

Solar solution

Premium solar solution with ideal setting options.

> page 49



HIGHLIGHT
★★★★★ 

Night watchman

Twin blinking LEDs mimic eyes in the night to ward off predators.

> page 61



HIGHLIGHT
★★★★★ 

Posts

Extremely fixed and sturdy. Height of insulators selectable.

> page 139



Always at your service. Visit us online at horizont.com

Electric fence energisers



horiSMART 2-level technology

horiSMART energisers only operate at a maximum of 5 joules output energy. When operating in conjunction with an efficient, well maintained fence, the energiser will operate at the lowest levels while delivering adequate power output – the CPN system = constant power niveau. With very high voltages the horiSMART technology operates in a warning phase, which deters animals and people without being dangerous or inflicting harm. The energiser can detect the difference between low residual resistance load and a contact load, adjusting the output accordingly. After 60 seconds the energiser switches to normal maximum output operation for the duration that the disturbance is on the fence. This can degrade any vegetation which has grown to touch the fence, keeping it clean and running efficiently.



APN – automatic power niveau

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



horizont 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 horizon 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

This unique feature produces a secondary discharge of power if a higher output is required due to high vegetation or poor fence line insulation. If a requirement for a higher output is detected, the secondary output is triggered automatically ensuring a much more effective barrier. Turbo-effect is a horizon patent. Now also with horiSMART energisers. Page 14 and 15.



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



horimax

For fences with heavy loading ≥ 500 Ohm the horiSMART energizers N280, N220, N160 and AN160 feature horimax technology. These energisers are capable of very high energy, ensuring optimum fence line conditions are maintained.



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.



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



Premium quality plastic, very durable, UV stabilised and high impact resistant. (Polycarbonate).



UV stabilised

A UV stabiliser is used to protect the product and prevent it from degradation caused by 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 are excluded as well as damages by abnormal use of product (for energizers). Tapes, wires and ropes – the warranty period refers to UV–stability of the product.

Explanation of power data



Stored energy



Impulse energy max



Max. fence voltage (high power terminal)



Fence voltage at 500 Ohm (high power terminal)



Max. fence voltage (low power terminal)



Output energy max. at fence load of



Max. fence length (CEE)



Max. fence length with no load



Max. fence length with light load



Max. fence length with heavy load



Current consumption



Qty of possible netting connection



Earth stakes (length and qty)



230volt operation



12volt operation



9/12volt operation



12/230volt operation

Some special characteristics of horizon fencing materials:



TLDmax

With newly developed conductors of TLDmax excellent conductivity is possible. The conductor is extremely weather resistant and high light connection. **Up to 180 x times improved conductivity compared to a standard quality (14,4 Ω /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 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.



horizont 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.



Benno Spilker
Product manager / electric fencing products

Your ideal energiser!

An electric fence system can be built up quick and easy! Have a look at our YouTube channel, our videos provide useful hints. At the first pages of our catalogue you can find solutions regarding the right combination of several components. You can easily compose your fence by selecting your components out of one product series!

Benno Spilker



What type of power should my energiser run from?



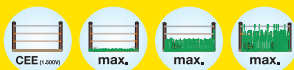
We differ our energizers between the types **B (9 V battery fencer)**, **A (12 V battery fencer)**, **N and M (mains fencer)** and **S (solar fencer)**. Each type offers advantages and disadvantages. See page > S. 8

What type of animal am I containing?

Each animal type has special characteristics. The unique sensitivity of the animal and the hair/coat is important in choosing the correct electric fence installation. With the help of the animal icons you can easily see which kind of animal we recommend the energizer is used with:



Which length should the fence be?



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. 5



What else?

look for detailed information within the catalogue:

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Checklist permanent fence	> p. 6
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Fence heights	> p. 9
Energizer series	> p. 10–11
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horizont – The electric fence expert

With horizon you have a consummate expert by your side. Owning more than 50 patents for products that increase animal safety, horizon has continued to excel in developing innovative products for more than 70 years.

Your advantages as a horizon 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 the product is ready to go when you are. Our reliability in comparison with competitor products allows us to offer longer guarantees on our equipment.



Reliable products

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



More than 50 patents & registered designs

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



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 a moments notice. Our simple modular designs mean that many of our stockists can repair your energiser on site and can help you out with a loan unit during the short repair time (usually within 48 hours).



Tested products

horizont electric fence products are subjected to tests by our engineers and under practical, working conditions. The products are only added to the portfolio when they meet the quality demands during the extensive testing procedures.



Consulting service

The horizon 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 are producing security and give impulses!



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 an easy task to choose the right energiser and suitable accessories. We will help you to answer the most important questions.

What are the basic considerations?

- The first goal of fence building: To prepare the open circuit so that it is closed when touched by an animal!
- Then: To make sure that the current stays on 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?

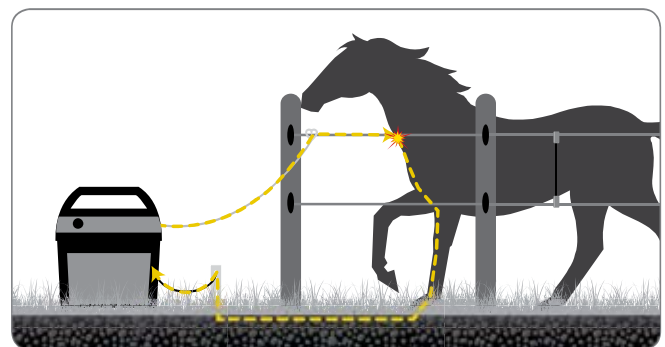
- The earthing is the »counterpart to the freely laid conductor material« in the fence.
- The energy emitted by the energiser is fed back into the energiser through the earth and the ground posts. The earthing turns the circuit into a closed circuit when the energiser is touched.

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!

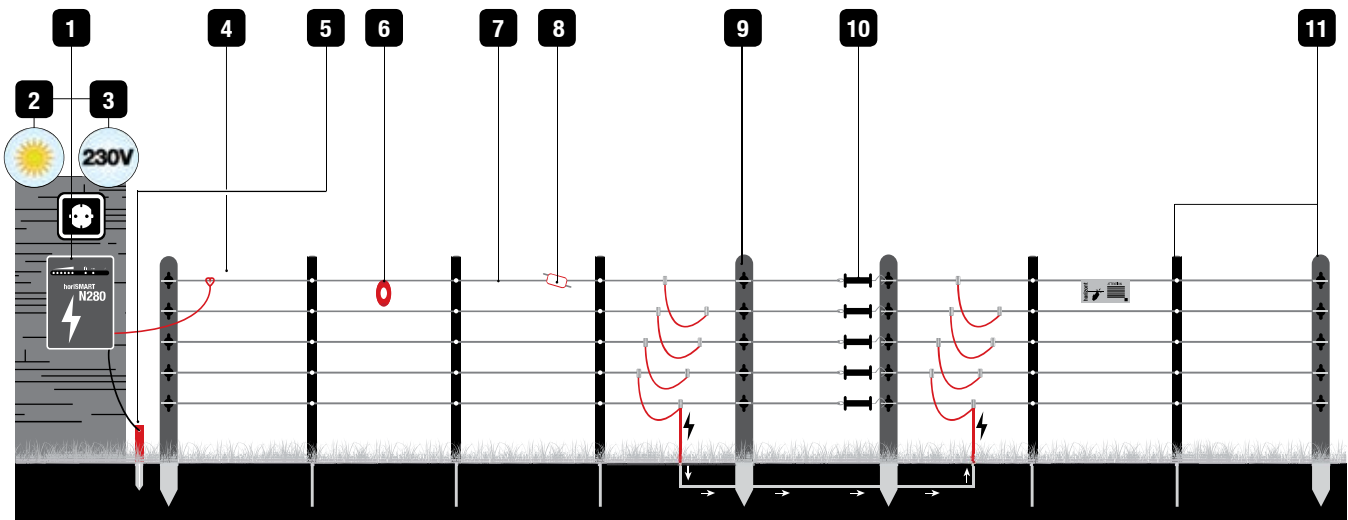


Why pay attention to good conductive material?

- 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 money on the conductive material can undermine the effectiveness of the other fence elements.
- 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.

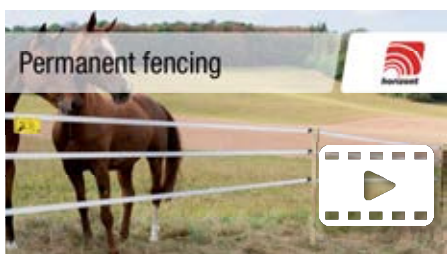
Is long grass at the fence a bad thing?

- 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 long-lasting, reliable permanent fence?

<input checked="" type="checkbox"/>	What?	Page	Why?
<input type="checkbox"/>	1 Electric fence energiser	10 – 46	The energiser transmits impulses to the fence. The impulses provide the deterrent in the electric fence.
<input type="checkbox"/>	2 Solar solution	47 – 57	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"/>	3 Energy	69 – 75	Have you thought about batteries, rechargeable batteries, 230V power pack and battery charger?
<input type="checkbox"/>	4 Connection material lightning protection, switch	63 – 68	Makes the electrical connection from the energiser to the fence. Lightning protection systems are a must for mains supply units.
<input type="checkbox"/>	5 Earthing and accessories	65 – 66	The energy flows from the ground through the ground post and the connecting cable back into the electric fence energiser.
<input type="checkbox"/>	6 Testers accessories, warning signs	58 – 61	Testers are necessary for informative fence inspection – they make it easier to check the fence function.
<input type="checkbox"/>	7 Conductive material tapes, ropes, wires	77 – 99	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"/>	8 Connecting and tightening	102 – 106	The conductive material can be connected firmly and electrically conductive with connectors. The right tensioners ensure taut conductors to avoid injuries to the animals.
<input type="checkbox"/>	9 Insulators	107 – 126	Hold the conductive material well insulated in position. The right insulator should suit the conductive material.
<input type="checkbox"/>	10 Gate handles and sets	128 – 134	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"/>	11 Posts	161	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.

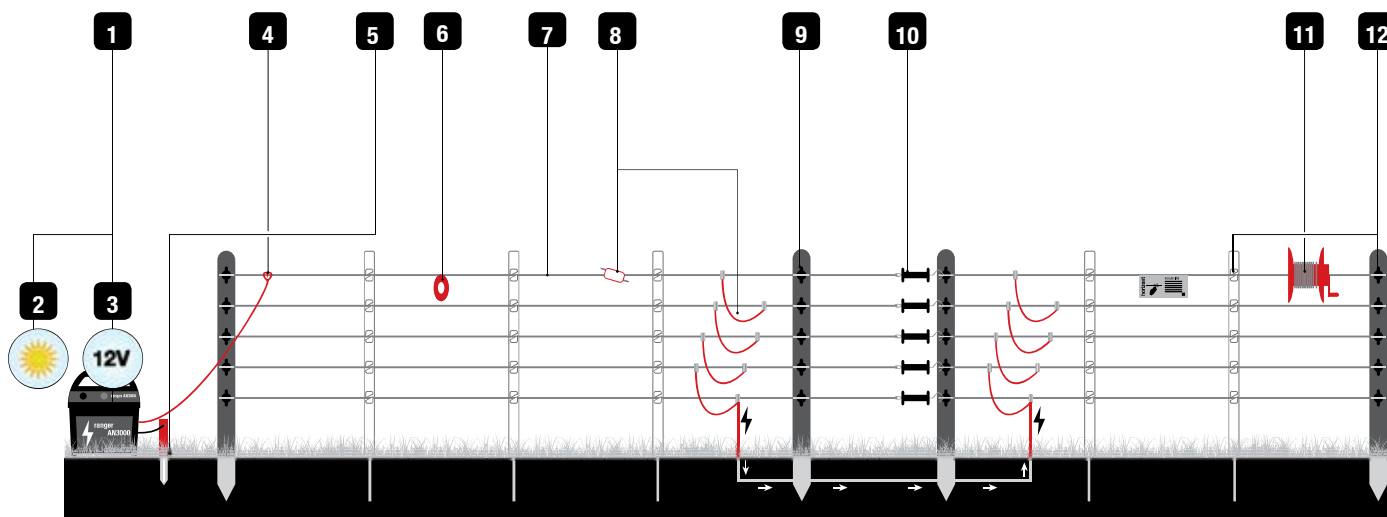


Have a look at our YouTube-channel!

Our electric fencing professional is explaining the most effective way to build a perfect permanent fence in a video step by step.

<https://www.horizont.com/permanent.fencing>





What equipment do I need for a portable fence?

<input checked="" type="checkbox"/>	What?	Page	Why?
<input type="checkbox"/>	1 Electric fence energiser	10 – 46	The energiser transmits impulses to the fence. The impulses provide the shock in the electric fence.
<input type="checkbox"/>	2 Solar solution	47 – 57	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.
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<input type="checkbox"/>	10 Gate handles and sets	128 – 134	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"/>	11 Reels	135 – 137	A portable fence or portable sections can be set up and dismantled quickly and easily with a reel.
<input type="checkbox"/>	12 Posts	138 – 144	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.



Have a look at our YouTube-channel!

Our electric fencing professional is explaining the most effective way to build a perfect portable fence in a video step by step.

<https://www.horizont.com/portable.fencing>





The right energy supply

The type of energy supply is just as important in determining your choice of energiser as the length of the fence system you wish to power. The type of energy supply (9, 12 or 230 Volt) will influence the mobility of the energiser and the level of maintenance required.



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. $120Ah : 0.022A = 400$ hrs.
- The 9 Volt battery is discharged 100%.
- see pg. 71



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 battery used by the current consumption of the energiser
- e.g. $100Ah : 0.5A = 200$ 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. 71



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:



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



Use a solar panel:
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 spacings are the optimum distances for fastening conductive material between the posts:

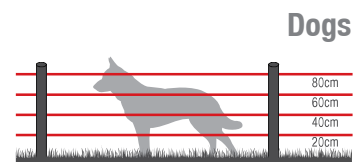
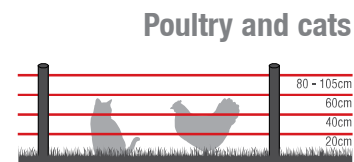
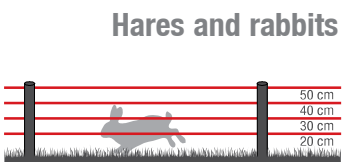
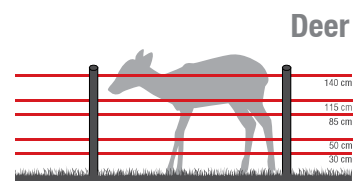
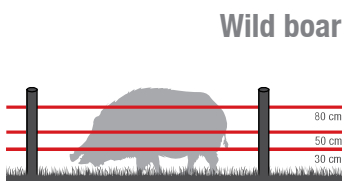
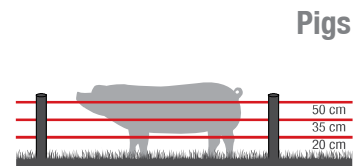
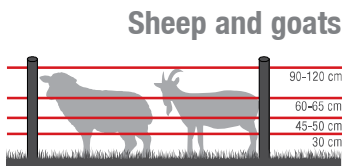
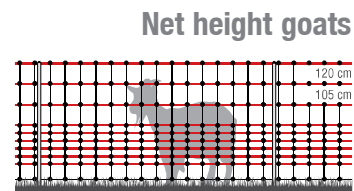
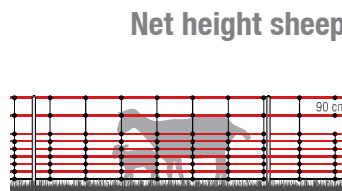
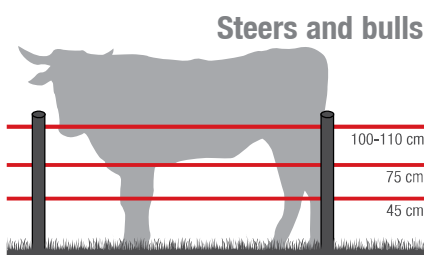
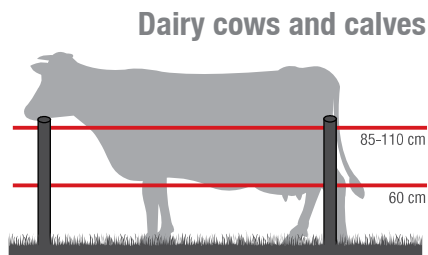
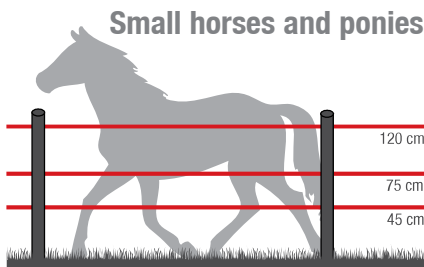
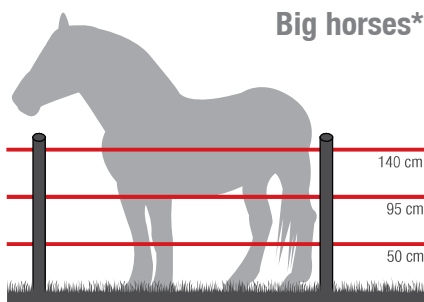
- **Ropes and twines:**
6 m to 8 m (depending on the net weight)
- **Tapes:**
3 m (for tape 40 mm), 5 m (for tape 20 mm),
6 m to 8 m (for tape 10 mm)
- **Wires:**
4 m (for diameter 6–8 mm), 6 m (for diameter 5–6 mm)
- **Terrain:**
Consider the terrain. If it is very uneven, more posts are necessary to 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. 61) 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 below measurements are recommended heights for your fence. Of course, the size of the animal and any relevant insurance regulations should also be considered when determining the heights of the wire. You should also consider the »jumping ability« of your animals.



* for showjumping horses ≥ 160 cm fence height



Electric fencing energisers

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 matching the colour coding and name.

2. The recommended application is quickly recognisable from the animal symbols printed on the energiser.

Every animal protected by an electric fence requires a specific electric fence system. horizont, as the leading European premium manufacturer of pasture fence systems, has specific solutions which provide a very high degree of safety and reliability.

Professionals (shepherds, dairy farmers, mixed farms) but also safety-minded smallholders and hobby farmers trust "Made in Germany" by horizont.

The following components must be considered individually for both the animal and basic conditions in order to select the correct products:

- Animal hair and its conductivity in order to transfer an effective yet not too high current pulse to the animal
- Size of the animal
- Fence length to ensure consistent power at all points
- Vegetation growth along the fence, as this weakens the power
- Fences for large pasture animals (such as cows and horses) who are often fenced in by conductor material that is positioned at a greater distance from the ground.

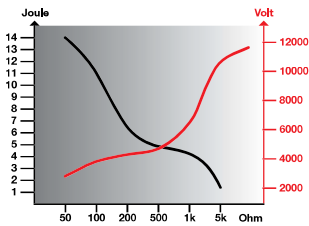
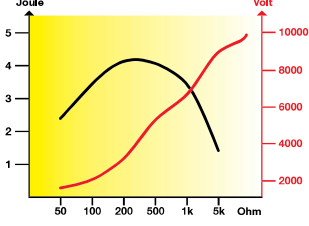
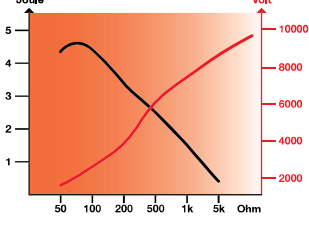
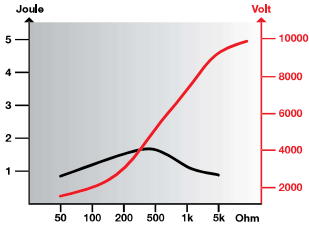
Animals which are protected from predators from the outside also require specific solutions: As opposed to sensitive grazing cattle, a robust wild boar with its strong bristles and robust character will need a very different current pulse to create an effective deterrent.





















































































From the many years of experience and close collaboration with live-stock owners, horizont can offer you and your animals the safest and most modern electric fence system from the animal's point of view.


















































































We offer intelligent solutions across all of our energiser series, offering easy to use features and the highest levels of safety as well as remote controls for electric fence devices!

We offer intelligent solutions across all of our energiser series, offering easy to use features and the highest levels of safety as well as remote controls for electric fence devices!

<p>horiSMART® turbostar®</p>		<p>horiSMART® – Our premium series for extreme and very high demands</p> <ul style="list-style-type: none"> • Powerful devices for extremely long fences • Many important safety features and functions that make life easier • Suitable for nearly all types of animals and configured individually 	<p>> Pg. 17</p> <hr/> <p>> Pg. 17</p>
<p>ranger®</p>		<p>ranger® – Our professional series for superior requirements and dry local conditions</p> <ul style="list-style-type: none"> • Suitable for grazers (cattle or horses) • Suitable for dry local conditions 	<p>> Pg. 21</p>
<p>hotSHOCK®</p>		<p>hotSHOCK® – The strong red devices for demanding special solutions (e.g. anti-wildlife, nets, ...)</p> <ul style="list-style-type: none"> • Chiefly suited for operating nets • Suitable for anti-wildlife fences • For robust animals 	<p>> Pg. 27</p>
<p>farmer®</p> <p><i>Equi STOP</i></p> <p>CAMO</p>		<p>farmer® – For the professional with normal conditions of use and the ambitious horse owner</p> <ul style="list-style-type: none"> • Suitable for sedate grazers • Suitable for simple cattle or horse fences • Suitable for dry local conditions 	<p>> Pg. 31</p> <hr/> <p>> Pg. 37</p> <hr/> <p>> Pg. 40</p>
<p>trapper®</p>		<p>trapper® – The entry level series for small and simple fence systems and for novices</p> <ul style="list-style-type: none"> • Simple, small and sturdy devices • High reliability and with the customary horizont quality (Made in Germany) 	<p>> Pg. 41</p>

Mains energiser 																			Qty of possible netting connection length 50m	Page
Product / Part no.	Energy													max. fence length (CEE)	max. fence length with no load	max. fence length with light load	max. fence length with heavy load			
 horiSMART® N280 10748								-	-	-		-	-	320	85	40	25	30	19	
 ranger® N80 10742		-						-	-	-			-	100	40	10	4	16	22	
 ranger® N40 10608		-						-	-	-			-	60	20	5	2	12	22	
 hotSHOCK® N50 10614		-						-	-	-			-	120	40	20	10	16	29	
 farmer® N25 10633		-					-	-	-	-	-	-	-	50	13	4	1.4	7	33	
 farmer® N15 10632		-					-	-			-	-	-	40	10	3.5	1.2	6	33	
 equiSTOP® M3 VCS 10622		-		-	-	-	-	-	-	-	-	-	-	60	20	6	2	-	38	
 equiSTOP® M1 10621		-		-	-	-	-	-	-	-	-	-	-	25	7	3	1	-	38	
 equiSTOP® M 14354		-		-	-	-	-	-	-	-	-	-	-	15	4	2	0.8	-	38	
 trapper® N8 10864		-			-	-	-				-	-	-	15	4	2	0.8	3	41	

Battery energiser  and Battery / Rechargeable battery energiser  																			Qty of possible netting connection length 50m	Page
Product / Part no.	Energy													max. fence length (CEE)	max. fence length with no load	max. fence length with light load	max. fence length with heavy load			
 turbostar® B 10285		-					-	-	-	-	-	-	-	10	6	4	1.5	3	20	
 ranger® B8 10841		-			-	-	-		-	-	-	-	-	20	12	5	2	-	26	
 ranger® B6 10840		-			-	-	-		-	-	-	-	-	12	10	4	1.5	-	26	
 ranger® B4 10445		-			-	-	-		-	-	-	-	-	10	8	3	1	-	26	
 ranger® B 10555		-			-	-	-				-	-	-	9	6	4	1	-	26	
 hotSHOCK® ABN5 10892		-	-	-				-	-	-				10	6	4	1.1	3	30	
 farmer® ABN4 10891		-			-	-	-		-		-	-	-	9.5	5.5	3.8	0.9	-	35	
 equiSTOP® B2 10620		-		-	-	-	-	-	-	-	-	-	-	8	5	3.5	0.8	-	39	
 equiSTOP® B1 10619		-		-	-	-	-	-	-	-	-	-	-	4	3	1	0.3	-	39	
 trapper® B 10616		-			-	-	-				-	-	-	3	1.5	0.5	-	-	43	
 trapper® AB2 14497		-		-	-	-	-	-		-	-	-	-	18	12	5	1.5	2	44	

GPS SECURITY SMS CONTROL MENU FUNCTION

ranger® AN70 GPS

- Battery- / Mains energiser, 6.5J Input, 4.8J Output
- For fences up to 40km with no load and 10km with heavy load
- Fence control is easily seen from further distances as all indications are shown by the energiser optically



Part no. **10857GPS** EAN **4 014803 446510**



- Argutektor display with 6 LED's – shows when the energiser has a higher power consumption for maintaining the output
- 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



For further information see page 23

ranger® AN3000 GPS

- 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



Part no. **10854GPS** EAN **4 014803 426497**



- 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



For further information see page 25

GPS SECURITY SMS CONTROL

hotSHOCK® A50 GPS

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



Part no. **10613GPS** EAN **4 014803 014238**



- Delivery contains:
 - Fence and earth connection cable with strengthened plastic cover

For further information see



page 29 and the internet



	230V	12V	9V	INPUT	MAX. OUTPUT	⚡	⚡	🔋	📱	📺	📺	📺	📺	📺	📺	📺	📺	☀️
10857 ranger® AN70	✓	✓		5.7J	4.8J	15000V	6000V	10000V	95–555mA	130km	40km	20km	10km	14x50m	5x1m	50W		
10854 ranger® AN3000	✓	✓		2.7J	2.0J	14000V	4500V	–	100–265mA	40km	15km	4.5km	1.7km	10x50m	2x1m	20W		
10613 hotSHOCK® A50		✓		4.2J	3.0J	12000V	6000V	10000V	550mA	80km	30km	15km	8km	14x50m	3x1m	20W		

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

SMS CONTROL

Remote control

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

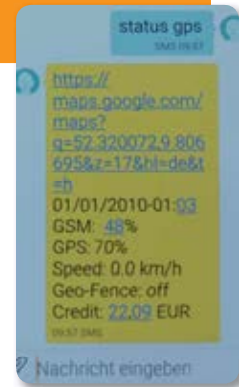


Example text message

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)



Example text message

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 the regular inspection of your fence.



Example text message



SMARTfencing

New freedom in animal control!

Have you already considered "Smart Home" products or solutions?

More than in almost any other area, we are more concerned with protecting our possessions, even when we are not at home.

A perceived rising rate of crime has led to an increase in demand for technical aids. New leaps in development which will allow an even greater safety and control have already become available in this area.

Is this worry justified or are we just more aware of and open to technical aids, such as surveillance cameras and apps which help us control things remotely?

Both is likely to be the answer.

But can these worries be limited to just our own four walls? Or do we need solutions for the outdoor area as well?

Increasing numbers of reports on cattle theft and animal loss due to unwelcome guests underscore the fact that risks in the outdoor area are increasing. How do you protect yourself from theft or from damage to your fence when it is less risky for thieves – no matter whether human or animal – to poach in outdoor, less populated areas.

Even without unbidden guests, keeping animals means very high – and also legal – requirements for every animal owner. Who will ensure that the pasture fence system will work 365 days a year around the clock without limitations?

From 2017 innovations from the "SMARTfencing Solutions" product range and with our patented technology we can offer you additional solutions to help protect you and your possessions.

This gives you the options to make sure your animal is well protected at all times. No matter where you are!

That is SMARTfencing for us!

Our future offers will therefore include the following components:

- Pasture fence device (basis)
- GPS / M2M module (for communication) with a communications provider
- Mobile phone / data contract

We are currently testing the different models and variations, so look out for the product information later in the year!



Professional energiser:

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



**horiSMART®
turbostar®**



For high performances

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

DELAY – safety circuit

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


For dry ground

The horiSMART® energisers are equipped with the horimax technology in a normal operating environment (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 Volts mains together with a 12 Volt battery. The energiser operates from the 230 Volts mains and switches over to the 12 Volt backup supply automatically if the 230 Volts 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 18

 horiSMART® series I Mains energiser 19

  horiSMART® series I Dual energiser 19

 turbostar® series I Battery energiser 20

turbostar® series I Solar accessories 20

horiSMART® (turbo with horimax)

Clever security energiser from horizon

horizon has updated the tried and tested, reliable security energisers horiSMART® with increased power. The new horiSMART® energisers follow the norms for strong energisers. If the new horiSMART® energisers detect a lengthy disturbance on the fence (vegetation growth, heavy loads), maximum energy is transferred to the line, following a safety delay of 55 seconds. Once the energiser recognises a fence load of 500 Ohms, power is restricted down to 5 Joules or less. When a sudden change of fence load is detected (minimum 6 impulse long lasting change) from 1 000 Ohm to 400 Ohm or lower as long as the fence load remains after a maximum 10 minutes an acoustical and optical alarm is triggered and the impulse interval prolongs to one impulse per 3 seconds. Therefore horiSMART energisers work safely and reliably under unfavourable conditions.



WARRANTY · WARRANTY
5
YEARS



 horimax technology

 turbo effect

 CPN = constant power niveau

 Control function
Disturbed function

 Battery control indication on battery energisers / indicate status of battery voltage

 400 Ohm – alarm function, which can be seen and heard from distance

 Earth control

 LED display – 1 000 – 6 000 Volt

 Pulse rate indicator light

 Power- and battery consumption

 Stored energy

 Maximum fence voltage

 Splashproof

 Approved and admitted according to updated norm EN 60335-2-76

 Fully insulated housing

 UV-protected

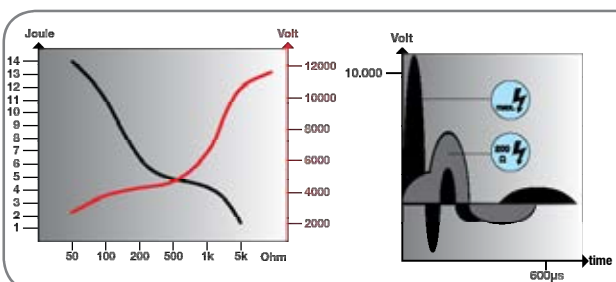
 Very solid PC-housing

 On- and Off switch (at 12 Volt energiser)

 Earth connection
Strong fence terminal

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

Only with good conductive fence material and perfect earthing maximum power can be achieved



- Highest possible security for humans and animals, as maximum power is given only when it's needed.
- High guarding safety as power is adequate for long fences and all ground conditions
- Minimum danger to humans and animals as the power only increases for the 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)



4 014803 011862



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)



4 014803 014207

Advantage dual-use:

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



Connection cable for 12V battery
Four level accumulator control

Recommended solar panel

1–2 x 50 Watt
Part no. 14873 (see p. 51)

Recommended battery
≥ approx. operating time

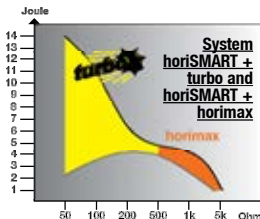
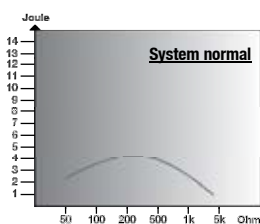
230 Ah
Part no. 25012B (see p. 72)
up to 153 – 287 hours
(= approx. 6.4 – 12 days)*

Big battery box

Part no. 21264 (see p. 72)

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 prematurely. Please read also notice on p. 71

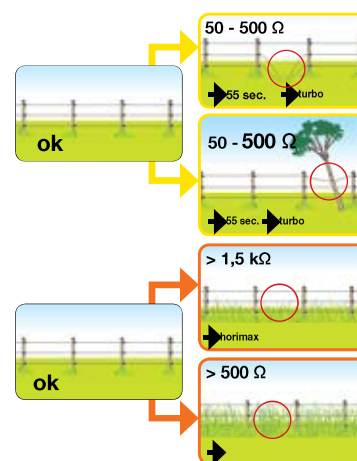


For fence loads under 500 Ohm get a second impulse to the basic impulse.

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

horimax:

For fence loads >= 500 Ohm the horiSMART® energisers N280, N220, N160 and AN 160 are using horimax–technology. This very high energy potential is available over a wide fence load range.



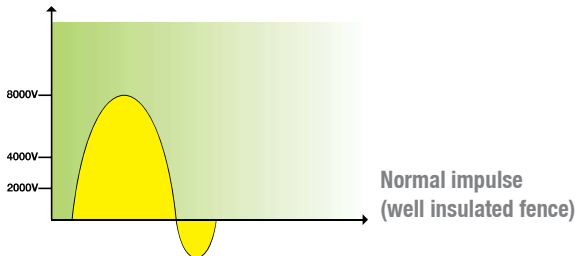
10748UK	horiSMART® N280	✓	–	✓	✓	25J	14J	12000V	4600V	35W	320km	85km	40km	25km	30x50m	5x1.5m	–
10746UK	horiSMART® N160	✓	✓	✓	✓	12J	8J	12000V	4400V	500–1200mA	180km	45km	21km	14km	17x50m	3x1.5m	50W

* Figures based upon mathematical calculations assuming optimal conditions.

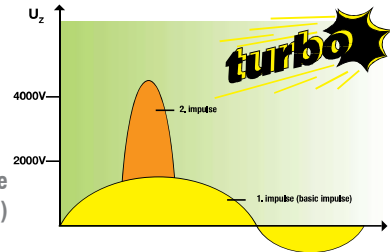
Explanation of symbols for features of the energiser please find at folder.

turbostar® B Unique turbo effect, significant 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.



turbostar® double impulse (fence with heavy load)



Those who choose the turbostar® energiser B once will never use any other energiser! Due to its double impulse and its load sensing circuitry this energiser is the best choice for dry ground, vegetation growth and long fences. Very often this energiser is used for deterring wild predators or for sheep keeping. Even at 500 Ohm resistance turbostar® B reaches more than 4 000 Volts, the best performance for a 9 Volt dry battery energiser.

turbostar® B The world champion of 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 the package:
 - Fence and earth connection cable with strengthened plastic cover
 - Earth stake with mounting rod part no. 88178



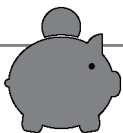
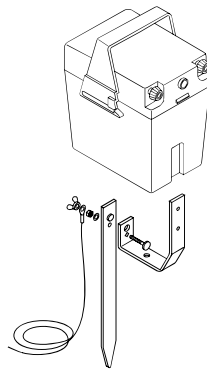
Part no.

10285

EAN



4014803000514



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 p. 70)
- Can also be operated with solar kit (see p. 50)
- Useable also with 12 Volt batteries (spare 12 Volt connection cable available, part no. 90501C)



Solarkit 2 Watt
Part no. 15264F
see p. 50



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

* Figures based upon mathematical calculations assuming optimal conditions.

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



Allrounder:

The ranger® energisers are specially designed for dry ground conditions. The AN energisers reach very high output voltages, offering high security.



ranger®



For dry ground

The ranger® series is ideally suited for dry ground conditions. This feature ensures the best performance, especially in very dry summer periods.

Effective & gentle

Due to the wide impulse shape, the energy develops effectively and gently on the fence system!

Intelligent »eco-system«

The ranger® 9 and 12 Volt energisers > pg. 26 are intelligent electric energisers offering very high performance. The intelligent »eco-system« and the horizon current saving circuit automatically adapt the output power to the fence condition.

Dual energiser

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

Situationally adjustable

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

Fence status display

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

Chapter

Page

ranger® series | Technology 22

230V
ranger® series | Mains energiser 22

230V 12V
ranger® series | Dual energiser 23 – 25

9/12V
ranger® series | Battery energiser 26



Approved and registered up to international regulations



UV-protected



Maximum fence voltage



Power- and battery consumption



Fully insulated housing



Very solid PC-housing



Stored energy



Splashproof



Disturbed function



Control function



LED display – 1 000 – 6 000 Volt



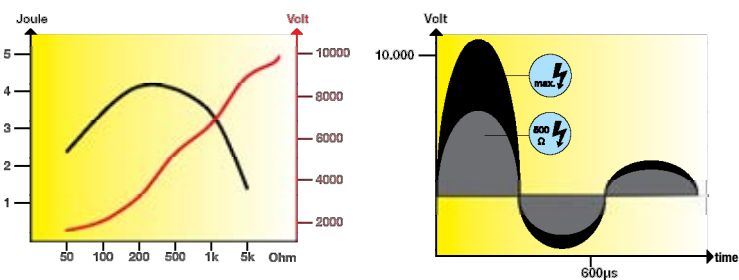
On- and Off and Menu switch (at 12 Volt energiser AN50 / AN70)

Earth control Earth connection Very strong fence terminal Strong fence terminal for paddocks and short pastures

Hint!
Fence control can be easily seen from further distances as all indications are shown optically by the energiser.

All-weather energiser – suitable also for dry ground

Ranger energisers have 3 terminals – a terminal for earth connection, one terminal for normal fences and one additional terminal 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. Ideal for use for fences near to domestic buildings as offers a high degree of safety when children are in the vicinity.



- 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.g. 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. **10742UK (with UK plug)** EAN 4 014803 1011855

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. **10608UK (with UK plug)** EAN 4 014803 007261



10742UK ranger® N80	✓	-	-	6J	4.2J	10500V	5600V	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	-

* Figures based upon mathematical calculations assuming optimal conditions.

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. 14–15)

- 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 energisers. The connection for the 12 Volt battery is located on the inside of the unit, so that a 12 Volt battery can be connected. On the reverse of the energiser there is an additional connection plug for a mains adaptor. (Available as spare part with part no. 47PSU0010UK). With this mains adaptor the fencer can be operated with 230 Volt. With the connection of mains adaptor 47PSU0010UK and a 12V battery the combi fencers can also operated in stand-by mode. In the event of 230 Volt mains failure, the fencer automatically operates from 12 Volt.



230 Volt mains adapter
47PSU0008UK



12 Volt battery connection



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



Also available! (10857GPSD see p. 14)
GPS SECURITY **SMS CONTROL** **MENU FUNCTION**



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. **10857** EAN **4014803108579**



ranger® AN70

Recommended solar panel **1 x 50 Watt**
Part no. 14873 (see p. 51)

Recommended battery ≥ approx. operating time **100 Ah**
Part no. 14126 (see p. 72)
up to 198 – 1052 hours
(= approx. 8 – 43 days)*

Recommended transport box **Part no. 14129** (see p. 76)

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. **10858** EAN **4014803108586**



ranger® AN50

Recommended solar panel **1 x 20 Watt**
Part no. 140641 (see p. 54)

Recommended battery ≥ approx. operating time **100 Ah**
Part no. 14126 (see p. 72)
up to 400 – 952 hours
(= approx. 16 – 39 days)*

Recommended transport box **Part no. 14129** (see p. 76)



10857	ranger® AN70	✓	✓	5.7J	4.8J	15 000V	6 000V	10 000V	45–450mA	130km	40km	20km	10km	14x50m	5x1m	50W
10858	ranger® AN50	✓	✓	3.5J	3.0J	12 000V	5 200V	10 000V	45–275mA	100km	20km	5km	2km	12x50m	3x1m	20W

* Figures based upon mathematical calculations assuming optimal conditions.

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

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

Advantage: Dual energiser

The new dual energiser AN3000 are 12 Volt energisers. 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 be operated in stand-by mode. This means that in the event of 230 Volts mains interruption, the energiser is automatically operated from 12 Volt.

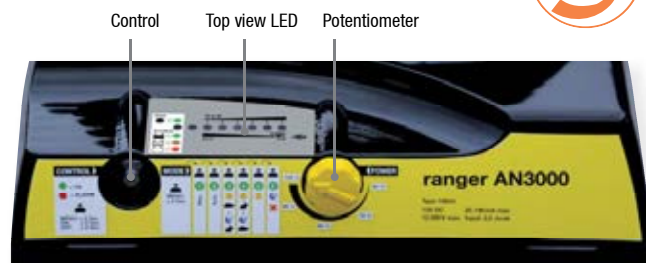


This energiser operates with **horizont load sensing circuitry:**

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

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

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



230 Volt mains adapter
47PSU00010FUK



12 Volt battery connection
47BL12



ranger® AN3000 /ranger® AN5000 / ranger® AN7000

- 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 maintaining 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
- Package contains:
 - Fence and earth connection cable with strengthened plastic cover



Part no.		EAN
10854	AN3000	4 014803 108548
10992	AN5000	4 014803 109927
10993	AN7000	4 014803 109934



For a compact application: ranger® AN7000 (battery in the housing)

Recommended solar panel
(solar panel at the housing)

1 x 20 Watt
Part no. 141461 (see. p. 52)

Recommended battery
≥ approx. operating time

85 Ah
Part no. 14894 (see. p. 72)
up to 188 – 1888 hours
(= approx. 8 – 78 days)*

For a residential application: ranger® AN7000 (battery next to the housing)

Recommended solar panel
(solar panel next to the housing)

1 x 50 Watt
Part no. 14873 including bracket 14143 (see. p. 51)

Recommended battery
≥ approx. operating time

85 Ah
Part no. 14894 (see. p. 72)
up to 188 – 1888 hours
(= approx. 8 – 78 days)*

ranger® AN3000

Recommended solar panel
(solar panel at the housing)

1 x 20 Watt
Part no. 141461 (see. p. 52)
fixture for solar modules
Art.-Nr. 14462 (s. S. 55)

Recommended battery
≥ approx. operating time

85 Ah
Part no. 14894 (see. p. 72)
up to 404 – 2125 hours
(= approx. 16.8 – 88.5 days)*

ranger® AN5000

Recommended solar panel
(solar panel at the housing)

1 x 20 Watt
Part no. 140641 (see. p.52)

Recommended battery
≥ approx. operating time

85 Ah
Part no. 14894 (see. p. 72)
up to 309 – 1888 hours
(= approx. 13 – 78 days)*



	230V	12V	9V	INPUT	MAX. OUTPUT	MAX. ENERGY	MAX. CHARGE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE	MAX. WIRE
10854 ranger® AN3000	✓	✓		2.6J	2.0J	14 000V	4 500V	40-210mA	50km	15km	4.5km	1.7km	10x50m	2x1m	20W	
			✓	0.7J	0.5J	5 600V	2 500V	40-85mA	14km	8km	3km	1km	–	2x1m	20W	
10992 ranger® AN5000	✓	✓		3.5J	3.0J	12 000V	5 200V	45-275mA	100km	20km	5km	2km	12x50m	3x1m	20W	
			✓	0.7J	0.5J	4 600V	2 000V	40-85mA	12km	7.5km	2.7km	0.8km	–	1x1m	20W	
10993 ranger® AN7000	✓	✓		5.7J	4.8J	15 000V	6 000V	45-450mA	130km	40km	20km	10km	14x50m	5x1m	50W	
			✓	0.7J	0.5J	4 600V	2 000V	40-85mA	12km	7km	2.5km	0.7km	–	1x1m	50W	

* Figures based upon mathematical calculations assuming optimal conditions.

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

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


The intelligent eco-system and the horizon energy saving circuitry adjust the output power to the fence condition automatically. Power consumption is therefore reduced. The energy saved with each impulse could be used for the next impulse, if required. High efficiency electric fencing can therefore be achieved. The ranger® B electric fencing range is suitable for multifaceted applications and on dry ground. The electric fencing range of ranger® B works safety and 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




Part no. **10841** EAN 



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




Part no. **10840** EAN 

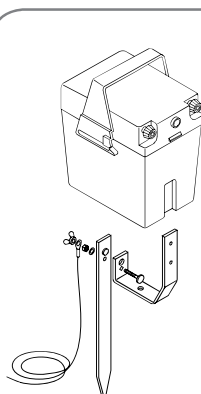


ranger® B4

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



Part no. **10445** EAN 



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. 70)
Can be operated with a solar kit (see p. 50)!

- Possibility to be operated with 12 Volt rechargeable batteries (12 Volt connection cable is available as a spare part, part no. 90501C). (see p. 73)

ranger® B

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



Part no. **10555** EAN 



Part no.	✓	✓	-	✓	✓	✓	0.75J	0.65J	10000V	1700V	20-90mA	20km	12km	5km	2km	-	1	2W
10841 ranger® B8	✓	✓	-	✓	✓	✓	0.75J	0.65J	10000V	1700V	20-90mA	20km	12km	5km	2km	-	1	2W
10840 ranger® B6	✓	✓	-	✓	✓	✓	0.55J	0.45J	9500V	1600V	15-70mA	12km	10km	4km	1.5km	-	1	2W
10445 ranger® B4	✓	✓	-	✓	✓	✓	0.4J	0.3J	9500V	2500V	16-44mA	10km	8km	3km	1km	-	1	2W
10555 ranger® B	✓	✓	-	✓	✓	✓	0.3J	0.29J	10000V	2200V	10-40mA	9km	6km	4km	1km	-	1	2W

* Figures based upon mathematical calculations assuming optimal conditions.

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



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

PREMIUM QUALITY
MADE IN GERMANY

hotSHOCK®



Ideal for long-haired, feathered and robust animals

Animals such as these are difficult to keep as their bodies are protected from the impulse by feathers, wool or thick bristles. The high voltage of the hotSHOCK® energiser is needed to reliably deter the animals.

High output energy

The energisers of the hotSHOCK® series have maximum output energy under dense vegetation conditions on the fence system. Those are common vegetation conditions for sheep knotted meshes or a wild animal fences.

3 connections

The hotSHOCK® energisers always have 3 terminals. 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.

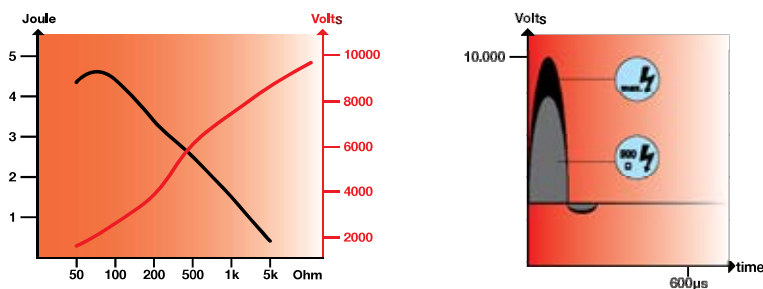
The power at the second fence output is always limited to a safe level of less than 1 Joule. This achieves high safety e.g. for example for children playing nearby which is particularly important for fence systems set up near to the house.

Chapter	Page
hotSHOCK® series I Technology	28
230V hotSHOCK® series I Mains energiser	29
12V hotSHOCK® series I Rechargeable Battery energiser	29
9/12V hotSHOCK® series I Battery energiser	30



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

hotSHOCK® energiser in large housings (N50, A50) always have 3 terminals. 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.



- Special energiser with high output energies at extremely low resistance
- A narrow impulse form allows energy to develop its power aggressively onto the fence system. This allows energy transport also at difficult conditions i.e. with heavy load when excluding wild predators or power loss with sheep netting where the low horizontal lines are often in contact with vegetation growth.
- The high voltages enable effective, secure containment of long haired and unsensitive animals.

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)



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



Part no.

EAN

10613



see p. 54

Included in the package

- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel **1 x 20 Watt**
Part no. **140641** (see p. 52)

Recommended battery ≥ approx. operating time **100 Ah**
Part no. **14126** (see p. 72)
up to 200 hours
(= approx 8 days)*

Recommended transport box **Part no. 14129** (see p. 76)

Hint! More information about discharge protection please find at page 71.

Also available: (10613GPSD see p. 14)

GPS SECURITY SMS 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



Part no.

EAN

10638



Included in the package

- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel **1 x 10 Watt**
Part no. **14063** (see p. 53)

Recommended battery ≥ approx. operating time **88 Ah**
Part no. **14125** (see p. 72)
up to 490 hours
(= approx. 20.5 days)*

Recommended transport box **Part no. 14129** (see p. 76)



	230V	12V	INPUT	max. OUTPUT	max. J	500 J	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km	max. km
10614 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	-	-	-	-

* Figures based upon mathematical calculations assuming optimal conditions.

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

HIGHLIGHT



hotSHOCK® ABN5

- Battery energiser, 0.5J Input, 0.37J Output
- For fences up to 6km with no load and 1,1km with heavy load
- 3-phase battery indicator light
- For use with 9 Volt dry battery, 12 Volt super vlies special battery and 230 Volts mains energy
- Inbuilt solar charge regulator – easy recharging from super vlies special batteries
- Dual energiser: Energiser can be used on 12 Volt battery and 230 Volts mains at the same time. The energiser operates from the 230 Volts mains and switches over to the 12 Volt backup supply automatically if the 230 Volts supply fails. The 12 Volt battery is trickle charged by the mains connection.
- **Included in the package:**
 - Fence and earth connection cable with strengthened plastic cover
 - Earth stake with mounting rod



Part no.

10892

EAN



4 014803 108920



hotSHOCK ABN5

Recommended solar panel	1 x 5 Watt Part no. 14499 (see pg. 49)
Recommended Super-Vlies-special battery ≥ approx. operating time	34 Ah Part no. 14501 (see pg. 73) up to 971 hours (= approx. 40 days)*
Recommended Dry battery ≥ approx. operating time	170 Ah Part no. 12012 (see pg. 70) up to 3617 hours (= approx. 150 days)*

- Brand new housing and new electronics
- Case accomodates rechargeable batteries with a capacity up to 34 Ah and dry batteries up to 200 Ah
- Retaining plate for different sized batteries, rechargeable battery housing and plug-in power supply when not in use
- Access through simple one handed operation
- Carrying comfort due to soft grip insert in carrying handle
- Cable routing to avoid pinched cables
- Easy monitoring of functions via LEDs
- Solar support in tandem with 9 Volt dry batteries enabled – Automatic transfer from solar supply during the day to battery operation at night
- Solar support with 12 Volt accumulators enabled – charging of the battery during sunlight and operation at night from the charged battery – automatic transfer
- 230 Volts mains adapter optionally available
- 5 and 10 watt solar panel optionally available
- Solar panel is easy to retrofit
- Solar panel can be adjusted at four angles to the sun (36°/43°/50°/60°)

Recommended angle of inclination

Northern Europe & Central Europe (including Austria & Switzerland)

90°	60°	50°	43°
transport position 90°	Winter Nov. – Feb.	Spring Mär. & Apr. Fall Sep. & Okt.	Summer Mai – Aug.

Recommended angle of inclination

Southern Europe & North Africa (South of Austria & Switzerland)

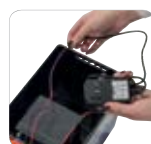
90°	50°	43°	36°
transport position 90°	Winter Nov. – Feb.	Spring Mär. & Apr. Fall Sep. & Okt.	Summer Mai – Aug.



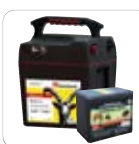
230 Volts mains adapter
47PSU0008UK



Solar panel see pg. 49



multi-optional storage compartment



innovative closing device



integrated earth and stand post



10892 hotSHOCK® ABN5	✓	✓	✓	0.5J	0.37J	12500V	3800V	47mA 35mA	10km	6km	4km	1.1km	3x50km	1x1m	5 Watt
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Allrounder:

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



farmer®



For dry ground

The farmer® series is ideally suitable for dry ground. This feature ensures excellent performance, especially in very dry summer periods.

Effective & gentle

Due to the wide impulse shape, the energy is delivered effectively and gently onto the fence system!

Current saving circuit

The farmer® AN15, AN25 and AS70 energisers > pg. 32 are intelligent energisers with very high performances. The horizon current saving circuit automatically adapts the output power to the fence condition.

Dual energisers

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

Battery indicator

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

Chapter

Page

farmer® series | Technology 32

230V farmer® series | Mains energiser 33

230V 12V farmer® series | Dual energiser 33, 34, 35

9/12V farmer® series | Battery energiser 35

farmer® series | Solar energiser 36



Approved and registered to international regulations

UV UV-protected

Power- and battery consumption

max. V Maximum fence voltage

INPUT Stored energy

CEE Theoretical fence length (by CEE)

PC Fully insulated housing

PC Very solid PC-housing

Splashproof

Battery control (at battery energisers)

LED LED display – 1 000 – 6 000 Volts



control function at AN15 / 25



Connection for mains adaptor on reverse

Earth control

Earth connection

Strong fence terminal

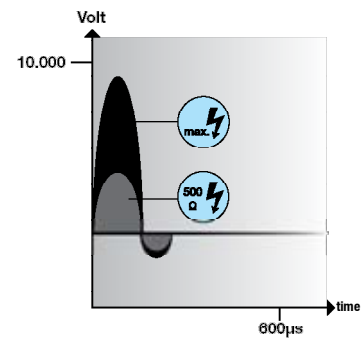
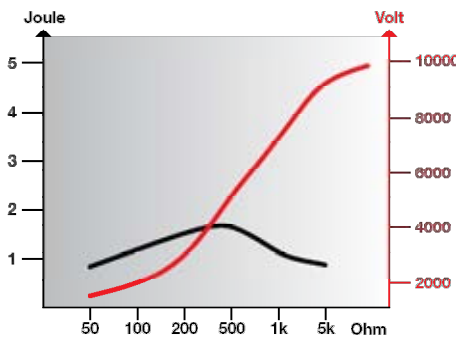
Hint!
Fence control is easy to see from further distance as all indications are indicated by the energiser optically.

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



All-weather energiser in a small compact housing

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



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

* 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® 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 energisers. 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 back-up mode. This means that if 230 Volts mains supply in interrupted, the energiser is automatically operated by 12 Volts.



230 Volt mains adapter
47PSU0008FUK



12 Volt battery connection

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



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 the package:**
- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel

1 x 20 Watt

Part no. 140641 (see p. 52)

Recommended battery
≥ approx. operating time

100 Ah

Part no. 14126 (see p. 72)
up to 526 – 2857 hours
(= ca. 21,9–119 days)*

Recommended transport box

Part no. 14129 (see p. 76)



12V

230V

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 the package:**
- Fence and earth connection cable with strengthened plastic cover

Recommended solar panel

1 x 10 Watt

Part no. 140631 (see p. 53)

Recommended battery
≥ approx. operating time

88 Ah

Part no. 14125 (see p. 72)
up to 977–2933 hours
(= ca. 40–122 days)*

Recommended transport box

Part no. 14129 (see p. 76)



12V

230V



	230V	12V	INPUT	MAX. OUTPUT	MAX. ENERGY	BATTERY	TRANSPORT BOX	SOLAR PANEL	FENCE	GROUND	CROSS	SUN		
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

* Figures based upon mathematical calculations assuming optimal conditions.

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
- Package 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



Recommended solar panel

1 x 10 Watt

Part no. 140631 (see p. 53)

Recommended battery
≥ approx. operating time

85 Ah

Part no. 14894

up to 944 hours
(= approx. 39 days) *
see. p. 72



- 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
- Package contains:
 - Fence and earth connection cable with strengthened plastic cover



Part no.

EAN

10856



Advantage: Dual energiser

The new dual farmer AN1000 are 12 Volt energisers that can accommodate a full size 12 Volt battery inside the case. It also features an additional connection plug for a mains adaptor on the reverse of the energiser. (Available as spare part with part no. 47PSU0008FUK).

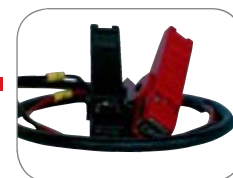
With the mains adaptor the energiser can be operated with 230 Volts.

With the connection of mains adaptor 47PSU0008FUK and 12 Volt battery.

The combi energiser can also be operated in back-up mode, so if 230 Volts mains supply is interrupted, the energiser is automatically operated by 12 Volt.



230 Volts mains adaptor
47PSU0008FUK



12 Volt battery connection



	9V	12/230V	INPUT	MAX. OUTPUT	lightning bolt	500 Ohm	battery	solar panel	grid	+	sun			
10855 farmer® AN1000	✓		1.4J	1.0J	11 000V	4800V	90mA	40km	10km	3.5km	1.2km	5x50m	1x1m	10W
10856 farmer® AN1000 Solar		✓	0.7J	0.5J	7 000V	3200V	70mA	13km	8km	3km	1km	–	1x1m	10W
10856 farmer® AN1000 Solar		✓	1.4J	1.0J	11 000V	4800V	90mA	40km	10km	3.5km	1.2km	5x50m	1x1m	–

* Figures based upon mathematical calculations assuming optimal conditions.

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

farmer® ABN4

- Battery energiser, 0.4J Input, 0.3J Output
- For fences up to 5.5 km with no load and 0.9km with heavy load
- With load sensing circuitry – energiser output and energy consumption adapts automatically to the fence condition
- 3-phase battery indicator light
- Can be used with with 9 Volt dry battery, 12 Volt super vlies special battery and 230 Volts mains energy
- With inbuild solar charge regulator – easy recharging from super vlies special batteries
- Dual energiser: Energiser can be used on 12 Volt battery and 230 Volts mains at the same time. Primarily the energiser is running on 230 Volts and is charging the 12 Volt battery. If the 230 Volts mains supply fails, the energiser automatically operates with 12 Volt battery
- Included in delivery:
 - Fence and earth connection cable with strengthened plastic cover
 - Earth stake with mounting rod



Part no.

EAN

10891



HIGHLIGHT



- Brand new housing and new electronics
- Case accomodates rechargeable batteries with a capacity up to 34 Ah and dry batteries up to 200 Ah
- Retaining plate for different sized batteries, rechargeable battery housing and plug-in power supply when not in use
- Access through simple one handed operation
- Carrying comfort due to soft grip insert in carrying handle
- Cable routing to avoid pinched cables
- Easy monitoring of functions via LEDs
- Solar support in tandem with 9 Volt dry batteries enabled – Automatic transfer from solar supply during the day to battery operation at night
- Solar support with 12 Volt accumulators enabled – charging of the battery during sunlight and operation at night from the charged battery – automatic transfer
- 230 Volts mains adapter optionally available
- 5 and 10 watt solar panel optionally available
- Solar panel is easy to retrofit
- Solar panel can be adjusted at four angles to the sun (36°/43°/50°/60°)

farmer ABN4

Recommended solar panel	1 x 5 Watt Part no. 14499 (see pg. 49)
Recommended Super-Vlies-special battery ≥ approx. operating time	34 Ah Part no. 14501 (see pg. 73) 2266 – 1214 Stunden (= approx. 94 – 50 days)*
Recommended Dry battery ≥ approx. operating time	170 Ah Part no. 12012 (see pg. 70) 7727 – 4857 hours (= approx. 321 – 202 days)*

Recommended angle of inclination

Northern Europe & Central Europe (including Austria & Switzerland)



Recommended angle of inclination

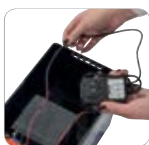
Southern Europe & North Africa (South of Austria & Switzerland)



230 Volts mains adapter
47PSU0008UK



Solar panel see pg. 49



multi-optional storage compartment



innovative closing device



integrated earth and stand post



10891 farmer® ABN4

✓	✓	✓	0.4J	0.3J	10000V	3300V	22-35mA	9.5km	5.5km	3.8km	0.9km	2	1x1m	5 Watt
	✓						15-28mA							

* Figures based upon mathematical calculations assuming optimal conditions.

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

HIGHLIGHT
★★★★★ 

farmer® AS70

Environmentally friendly use of the sun energy!

- Compact solar energiser with integrated 12V / 12Ah battery
- Three step battery control display
- With automatic solar charging controller
- 230V charger for keeping up the charge of the integrated 12V battery
- Compact single unit energiser and solar module
- Integrated mount for earth post on the case
- Robust plastic solar panel
- Energy saving function – automatic regulation

Package includes:

- 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 fitting for the earth stake



Integrated 12 Volt battery



Mains power socket 230 Volt*



Integrated handle



14475UK farmer® AS70	12V/12Ah	0.65J	0.50J	11 000V	3600V	20–50mA	18km	16km	4.2km	1.6km	1x1m	10W
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* Figures based upon mathematical calculations assuming optimal conditions.

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



All-round energisers for horse fencing. Our equiSTOP® range is especially developed for the fencing of horses which are sensitive to electricity.

PREMIUM QUALITY
MADE IN GERMANY



Ideal for the fencing of horses

The energisers of our equiSTOP® range are especially designed for horse fences where conducting material is situated at a greater distance from the ground. With this type of fence the conducting material is generally free of vegetation.

Fence energy becomes important when used in conjunction with short-haired horses as they are more susceptible to the impulse.

Adequate energy output

The energy output is adapted for the most common applications and paddock sizes or horse fencing.

Easy handling

With an emphasis on ease of use, all energisers are equipped with a simple control function display.

Can be operated with solar energy

The rechargeable battery energiser and the 9V energiser can be operated with solar energy if used in conjunction with a solar panel.

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230V

equiSTOP® series I Mains energiser

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12V

equiSTOP® series I
Rechargeable battery energiser

38

9/12V

equiSTOP® series I Battery energiser

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equiSTOP® energiser for horses

horizont has developed the equistop range specifically with horse owners in mind. Within the 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 those who are new to electric fencing, and they offer an excellent price / performance balance. All energisers feature attractive animal symbols on the housings and are, by design, secure for the use with horses.

equiSTOP® M3 VCS (230V)

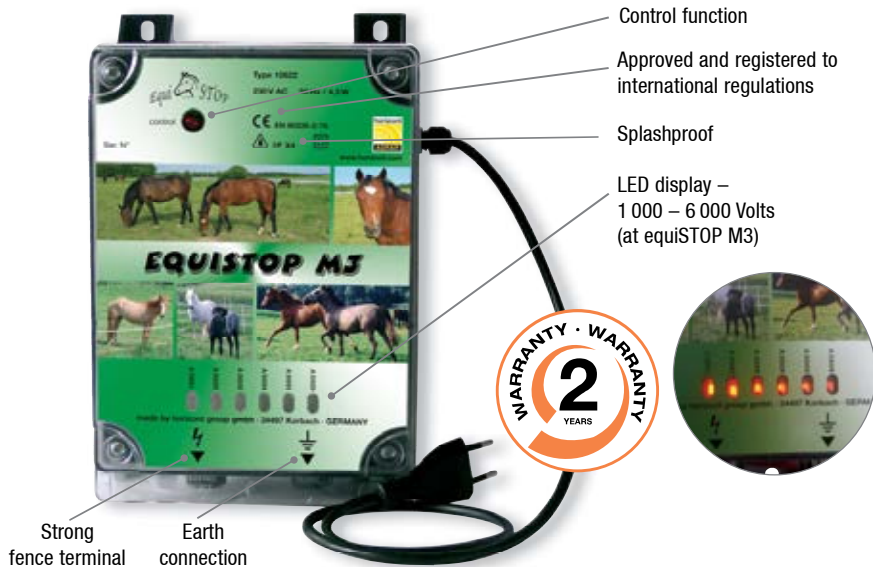
- Mains operated energiser, 3J Input, 2.3J max. Output
- For fences up to 20km with no load and 2km with heavy load
- With function control lamp and 6-level LED indication bar



Part no.

EAN

10622UK (with UK plug)



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)



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)



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 the package

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



Part no.

EAN

10623



Recommended solar panel	1 x 10 Watt Part no. 140631 (see p. 53)
Recommended battery ≥ approx. operating time	88 Ah Part no. 14125 (see p. 72) up to 550 hours (= approx. 23 days)*
Recommended transport box	Part no. 15466 (see p. 76)

	230V	12V	LED	OK	INPUT	THEL. OUTPUT	max. J	500 J	Battery	60km	20km	6km	2km	2x1.5m	
10622UK equiSTOP® M3 VCS	✓	-	✓	-	3J	2.3J	13000V	5200V	4.5W	60km	20km	6km	2km	2x1.5m	-
10621UK equiSTOP® M1	✓	-	-	✓	1J	0.8J	8500V	4700V	2W	25km	7km	3km	1km	1x1.5m	-
10863UK equiSTOP® M	✓	-	-	✓	0.8J	0.45J	8000V	3900V	1.5W	15km	4km	2km	0.8km	1x1.5m	-
10623 equiSTOP® A2	-	✓	-	✓	1.3J	0.9J	10000V	4000V	90mA	30km	10km	4km	1.5km	1x1m	10W

* Figures based upon mathematical calculations assuming optimal conditions.

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 the package

- Fence and earth connection cable with strengthened plastic cover
- The energiser could run with a 9V or a 12V battery
- Earth stake



Part no.

EAN

10620



equiSTOP® B2 Solar

Part no.

EAN

10624



- Useable with all dry volt batteries in small and big housings (see p. 70)
- The energiser can also run with solar panels (see p. 50)
- Can also be operated with 12 Volt wet batteries (12 Volt connection cable as spare part available, part no. 90501C). (see p. 73)

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.

EAN

10619



	6V	9/12V	OK	INPUT	MAX. OUTPUT	9000V	2200V	12V – 25mA 9V – 35mA	8km	5km	3.5km	0.8km	1	2W
10620 equiSTOP® B2	-	✓	✓	0.3J	0.2J	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

* Figures based upon mathematical calculations assuming optimal conditions.

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

EDITION



CAMOUFLAGE

PREMIUM QUALITY
MADE IN GERMANY

Camouflaged energiser:

The inconspicuous CAMOUFLAGE energisers blend in with the environment helping to prevent theft!

Camouflage

- Battery powered energiser, 4.8J Input, 2.8J max. Output
- For fences without vegetation up to 70km and 6km with high vegetation

Included in the package:

- Fence and earth connection cable with strengthened plastic cover



Recommended solar panel	1 x 20 Watt Part no. 140641 (see p. 51)
Recommended battery ≥ approx. operating time	100 Ah Part no. 14126 (see p. 72) up to 208 hours (= approx. 8 days)*
Recommended transport box	Part no. 14129 (see p. 76)



Part no.

EAN

10932CAMO



10932CAMO	✓	4.8J	2.8J	10 000V	5 100V	500mA	70km	25km	12km	6km	11x50m	3x1.0m	20W
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* Figures based upon mathematical calculations assuming optimal conditions.

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



Compact energiser:
trapper® units are compact, robust, multi purpose, entry level energisers .



trapper®



Combi-energisers

The trapper® AN energisers can be operated from either 230 Volt or 12 Volt. All connections for both 230V and 12V operation are included with the product

Compact housing

The trapper® AN and N energisers have a slim, robust housing ensuring a long-lasting energiser which is easy to install.

Complete solar package

The trapper® AS energisers are fully-integrated solar energisers packaged complete with 12 Volt battery and mains adaptor for recharging the battery.

Battery indicator


The level of battery charge is indicated in 3 stages on the trapper® AS energisers, offering information about the battery condition.

Solar charge control

The trapper® AS energisers are equipped with an automatic solar charge control ensuring the battery is optimally charged

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9/12V	43
trapper® series I Battery energiser	



Strong fence terminal Earth connection

Handy combined energiser for 12 Volt / 230 Volt operation

trapper® combined energisers can be operated from either 230 Volt or 12 Volt. They are the perfect starter energiser for protecting sensitive animals.



trapper® combined energiser – trapper® AN8, AN12 and AN24 operate from either a 12 Volt battery or 230 Volt mains power.

- Connector for 12V or 230V
- Approved and registered to international regulations
- Shplashproof
- Compact housing (19 x 8 x 5cm)



Safety hint !

While operating with 230 Volt mains power, energiser and mains adapter should be installed in a dry, weatherproof building.

Included in the package:
12V connection cable, 230V line adaptor, fence and earth connection

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 adaptor, fence and earth connection

Part no. **10865UK** EAN

trapper® AN12

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

Part no. **10866UK** EAN

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 adaptor, fence and earth connection

Part no. **10867UK** EAN



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. **10864UK** EAN



	230V	12V	INPUT	MAX OUTPUT	⚡	BATT	PLUG	FENCE	GRID	CROSS	SUN		
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

* Figures based upon mathematical calculations assuming optimal conditions.

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

trapper® B

- Battery powered energiser 0.18J Input, 0.14J max. Output
- for fences without vegetation up to 3km and 0.3km with high vegetation



Part no. **10616** EAN

Included in package:

- Fence and earth connection cable with strengthened plastic cover part no. 15522
- Can be operated with a 9V battery or a 12V rechargeable battery
- Earth stake



10616 trapper® B	✓	0.18J	0.12J	8600V	1.500V	24–28mA	4.0km	3.0km	1.0km	0.3km	1x1m	2W	

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 single unit energiser and solar module
- Integrated mount for earth post in the housing
- Robust plastic solar panel
- Energy saving function – automatic regulation

Package includes:

- Fence and earth connection cable with strengthened plastic cover
- 230V mains adaptor for battery charging



Part no. Product EAN

14981UK	trapper AS20	
14982UK	trapper AS35	
14983UK	trapper AS70	



HINT!
Charge before use



Integrated solar panel



Integrated fitting for the earth stake



Integrated 12 Volt battery



Mains power socket 230 Volt*



Integrated handle

14983 trapper® AS70	12V / 12Ah	0.65J	0.50J	11 000V	3600V	50mA	18km	16km	4.2km	1.6km	1x1m	10W	
14982 trapper® AS35	12V / 7Ah	0.33J	0.25J	9000V	3000V	26mA	8.5km	5.0km	3.6km	0.9km	1x1m	5W	
14981 trapper® AS20	12V / 7Ah	0.18J	0.15J	7500V	2500V	17mA	3.7km	2.8km	0.9km	0.3km	1x1m	2W	

* Figures based upon mathematical calculations assuming optimal conditions.

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



hobbygard® N (230 Volts)

- Ideal for use with netting to protect flower beds and vegetable gardens from rabbits (see p. 152)
- Ideal for deterring foxes with poultry netting or with fence tape (see p. 150)
- Included in package:
 - Earth post
 - Fence and earth connection leads each 3m long



Part no. **104271UK (with UK plug)** EAN **4 014803 440624**



A handy and efficient 230V mains energiser designed for gardens and short equine fences



hobbygard® A (12 Volt)

- For protection of flower beds and vegetables against rabbits in connection with a fence net (see p. 152)
- For protection of poultry fences against foxes in connection with a fence net or with fence tape (see p.150)
- Included in package:
 - Earth post
 - Fence and earth connection leads each 3m long



Part no. **103171** EAN **4 014803 440631**



A handy and efficient 230V mains energiser designed for gardens and short equine fences. Complete with fence and earth connection, warning sign and earth stake.

HIGHLIGHT ★★★★★



trapper® AB2

- Our new entry level energiser for domestic and hobby use offering a multitude of features. Suitable for users who attach importance to safety and quality made by horizon.
- Battery energiser, 0.18J Input, 0.22J Output
- For fences up to 1.5 km with no load and 0.5km with medium load
- On / off switch with pulse control
- Two different operating modes: slow and normal pulse repetition
- Power supply by 6V and 12V possible



Part no. **14497** EAN **4 014803 144973**

- trapper® AB2 is a hobby entry level energiser for domestic use
- Optional Solar support
- Mounting options on earth stake with pointwith earthing connection or post/wall hanging with screws
- Also hangs on the fence line

- Included in package:
 - Earth post
 - Fence and earth connection leads each 3m long
 - Battery holder for 4 x 1.5V
 - Battery connection for an external 12V-battery



Part no.	Model	6V	12V	230V	INPUT	MAX. OUTPUT	BATTERY	SOLAR	Other	1	2	3	4
104271	hobbygard® N			✓	0.25J	0.15J	6 500V	1 000V	2W	3km	1.5km	0.5km	1
103171	hobbygard® A		✓		0.25J	0.15J	6 500V	1 000V	20mA	3km	1.5km	0.5km	1
14497	trapper® AB2	✓			0.18J	0.12J	11 000V	2 000V	17/25 mA 8/11 mA	3km	1.3km	0.4km	1

* Figures based upon mathematical calculations assuming optimal conditions.

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

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



hobbygard N-Set (230 Volts)

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)



50m electrified poultry netting kit

Electrified poultry netting provides a low visibility, effective deterrent against most predators. Easily moved, stored and re-erected, 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 also pay attention to our poultry netting gate (see page 145–154) !

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 then re-connected.



Part no.

EAN

10430UK (with UK plug)



Approved by Federal Office of veterinarian nature (BVET)

scout N2 pigeon

- A special energiser for specific use in deterring pigeons
- Undisturbed operating energisers for buildings
- Radio – controlled very strong



Part no.

EAN

10407UK (with UK plug)



Complete solution for protection against pigeons

The problem:



The solution:



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

Pigeons carry parasites internally such as mites and pigeon ticks (a single pigeon can produce approx. 10 –12 kilos of wet droppings per year).

The most effective method to keep pigeons away are electric fence systems powered 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 long runs.

We work with reputable specialists who offer tailor-made solutions for those with pigeon problems. Please do not hesitate to contact us – we will forward your enquiry.

PREMIUM QUALITY

MADE IN GERMANY

Energy
– and the environment around the energiser

HIGHLIGHT



Solar panel + battery + device

Solar assist for the 9 Volt operated battery and 12 Volt battery devices for saving energy

> p.49

Energy

For a dependable use of an energiser, a reliable energy supply is indispensable. The energy supply is ecologically 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



Solar solutions

Flexible solar power for ABN energisers. > page 44



HIGHLIGHT



Performance

Batteries for a powerful operation. > page 72



HIGHLIGHT



230 volt power

Mains adapter for a residential operation. > page 74

Chapter

Page

Energy | Solar solution

50 - 59

Energy | Controlling and additional devices

60 - 63

Energy | Lightning protection, to switch, to connect

64 - 66

Energy | Earthing and accessories

67 - 70

Energy | Dry batteries

72 - 73

Energy | Battery, mains adapter, battery charger

74 - 77

Energy | Accessories

77 - 78

Application of solar systems!

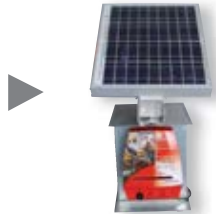
The sun as an energy source can be used for electric fence installations. Horizont 9V and 12V energisers as well as the combi unit trapper solar can offer this functionality. In the long term solar energy is both environmentally friendly and economical to run. Even at our latitudes the use of solar units is possible without any restrictions from spring to autumn.



5 options of solar operation



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



12 Volt or 12 / 230 Volts-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.

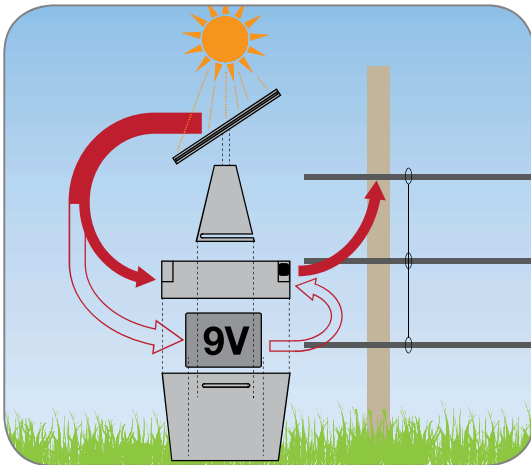


9 / 12 / 230 Volts dual energisers for solar power usage by a solar panel fastened at the energiser.

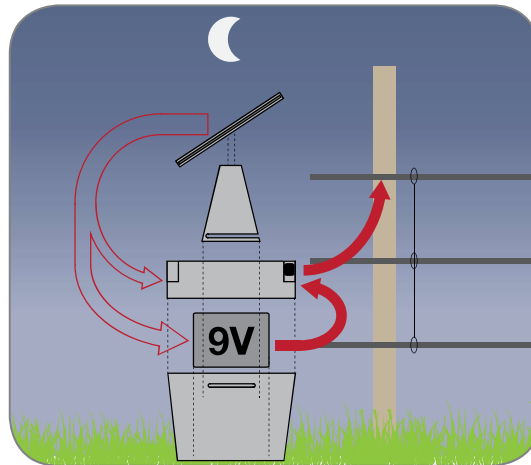


Complete solution with integrated solar panel and strong 12 Volt battery. Recharging the battery is possible when not in use with a battery recharger unit.

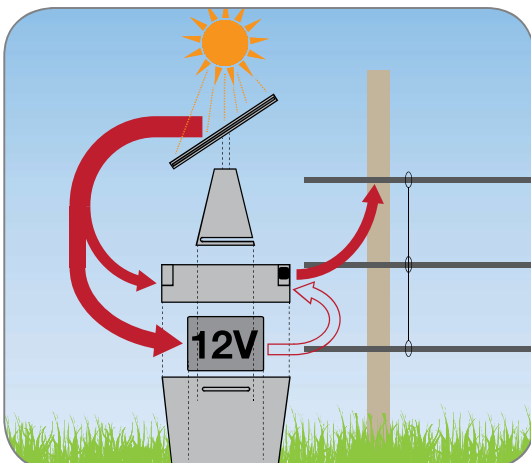
2 possible combinations with solar panel and 9V battery and 12V battery



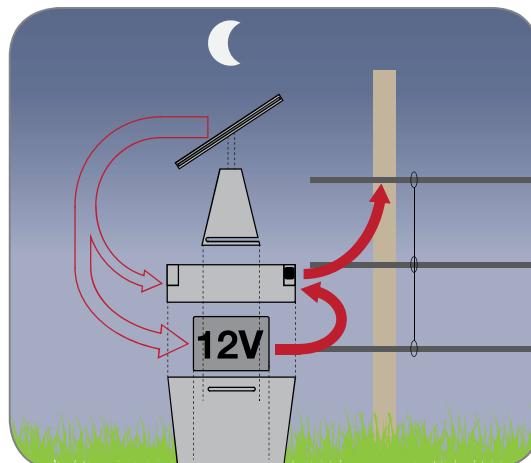
Solar panel and 9V battery



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.

HIGHLIGHT



Solarkit 5 and 10 watt

- Sturdy frame and holder of polycarbonate
- Light construction of solar panel and frame of plastic
- Monocrystalline solar panel
- Without charge controller, as the charge controller is installed in the pasture fence device

Solarkit, 5 Watt

Part no.

EAN

14499

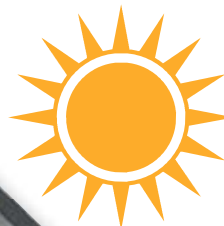


Solarkit, 10 Watt

Part no.

EAN

14511



OPERATING PRINCIPLE:

The solar panel produces electricity as soon as it is exposed to usable sunlight. The pasture fence device requires consistent electricity – by day as well as by night. The electricity generated in this way by the panel is stored in a rechargeable 12 V battery, which means the device can operate without sunlight or can be supplied directly by a 9 V battery. The solar panel may not always have a sufficiently large output to completely recharge the battery – especially during the dark, grey and foggy months (e.g. October to February). For temperatures around 0 degrees Celsius or below, we recommend using a large 9 V alkaline battery instead of a 12 V rechargeable battery in any case. The device is operated primarily from the solar panel. If the solar panel does not have sufficient output, the device switches automatically to the connected 9 volt battery or to the 12 volt rechargeable battery. **OPTIMAL SOLAR ALIGNMENT AND SETTING** The correct placement of the pasture fence device and the solar panel is crucial for the best possible operation of the device.

1. POSITION THE PASTURE FENCE DEVICE SO THAT THE PANEL POINTS SOUTH.

This position provides the panel with the maximum amount of sunlight even during the less bright winter days. When placing the device, consider the position of the sun throughout the day and avoid a location which could cover the device with shade from trees, bushes or high grass.

2. DETERMINE THE CORRECT ANGLE OF INCLINATION FOR THE SOLAR PANEL.

During the winter (with the exception of southern Europe), there may not be enough sun hours to completely charge the battery. Charge the battery externally as soon as the battery indicator flashes green/red or red, or alternatively use a large, alkaline 9 V battery with 170–200 Ah, which is also recommended for temperatures around or below freezing.

3. REMOVE DEPOSITS AND DIRT FROM THE SOLAR PANEL AT REGULAR INTERVALS.

(specifically along gravel paths), leaves and snow, since these can reduce the performance of the module for recharging the rechargeable battery.

Performance:	5 Watt or 10 Watt
Suitable for:	hotSHOCK® ABN5, farmer® ABN4
Battery recommendation:	All 9V batteries and 12V super vlies special batteries up to 34 AH – see page 70, 72
Dimension (LxWxH):	39.0cm x 26.5cm x 13.7cm

There are 2 choices:

- 1. The device works with module in parallel operation (directly via the solar module during the day and via 9 volt dry battery at night).
- 2. The device also works with a Super Glass Mat Battery, which is charged over the module (see p. 70).

Transport position



Winter




Summer



Solarkit 2 Watt

- For horizon 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

Solarkit 2 Watt

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

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 an inbuilt 12V Super Vlies battery, that will be charged by the panel.

Part no. EAN
15264F 



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

Performance: 2 Watt
Suitable for: all horizon battery energisers built from 1981 e.g. turbostar® B, ranger® B, horigard® B, farmer® B, hotSHOCK® B4 a.o.)

Solar module, monocrystalline 50 Watt

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

Part no.

EAN

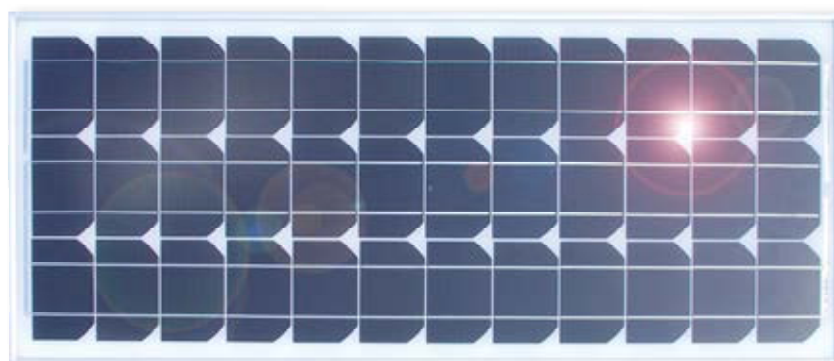
14873



Performance: 50 Watt
Suitable for: horiSMART® AN160, hotSHOCK® A50, ranger® AN70, ranger® AN7000

Battery recommendation: Special battery (230Ah, 100Ah) see p. 72

Dimension (l x w x h): 80.0cm x 56.0cm x 3.5cm



Fixture for solar modules

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



Part no.

EAN

14143



**More Solar modules
please find on
pages 54 – 55**





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. 72
Dimension (l x w x h): 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. 73
Dimension (l x w x h): 67.2cm x 29.6cm x 2.5cm



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. 72
Dimension (l x w x h): 64.7cm x 29.6cm x 2.5cm



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. 72)
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

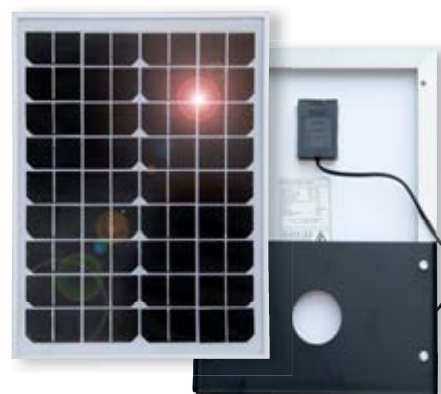
Part no.

EAN

14463



Performance: 10 Watt
Suitable for: farmer® AN1000
Battery recommendation: Super-Vlies-Batteries (45Ah, 80Ah) (see p. 73)
Dimension (l x w x h): 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. 72)
Dimension (l x w x h): 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

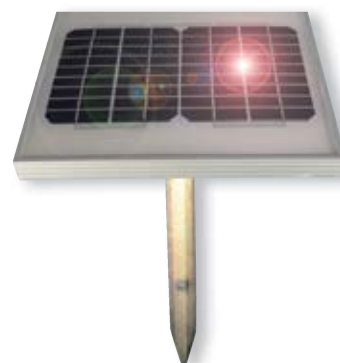
Part no.

EAN

14152



Performance: 5 Watt
Suitable for: farmer® A1000 and other energisers with reduced current consumption
Battery recommendation: Special-Battery (63Ah) (see p. 72)
Dimension (l x w x h): 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
- Length: 62cm

Part no.

EAN

14923



4 014803 149237



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



4 014803 149077



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)
- Suitable for 14907 (see. above) and 5, 10, 15 und 20 solar modules (see p. 52 – 53)

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

Part no.

EAN

14156



4 014803 141565



Attach fixture for solar modules

- With this attach fixture all 5 – 20W solar panels can be mounted on the energisers 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 solar modules (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



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



AKKU

INPUT

MAX. OUTPUT

max. I

500 g

max. I

max. I

max. I

max. I

max. I

max. I





































max. I

max. I

14981UK trapper® AS20	12V / 7Ah	0.18J	0.15J	7 500V	2 500V	17mA	3.7km	2.8km	0.9km	0.3km	–	1x1m	2W
14982UK trapper® AS35	12V / 7Ah	0.33J	0.25J	9 000V	3 000V	26mA	8.5km	5.0km	3.6km	0.9km	–	1x1m	5W
14983UK trapper® AS70	12V / 12Ah	0.65J	0.50J	11 000V	3 600V	50mA	18km	16km	4.2km	1.6km	–	1x1m	10W
14475UK farmer® AS70	12V / 12Ah	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.

Combine or complement your energiser corresponding to the chart below to receive your ideal solar solution!

Energiser		Transport box		Mounting		Solar module		Battery	
Part no.	Page	Part no.	Page	Part no.	Page	Part no.	Page	Part no.	Page
 horiSMART® AN160 10749 Pg. 19	+	 21264	+	 14143 Pg. 75	+	 14873 Pg. 51	+	 25012B Pg. 72	
 turbostar® B 10285 Pg. 20	+	—	+	—	+	 15264F Pg. 50	+	 12012 Pg. 70 15842 Pg. 73	
 ranger® AN 70 10857 Pg. 23	+	 15466 Pg. 75 14444 Pg. 76	+	 14143 Pg. 75	+	 14873 Pg. 51	+	 14126 Pg. 72	
 ranger® AN 50 10858 Pg. 23	+	 15466 Pg. 75 14444 Pg. 76	+	 14143 Pg. 75	+	 140641 Pg. 52	+	 14126 Pg. 72	
 ranger® AN7000 10993 Pg. 25	+	—	+	 14143 Pg. 75	+	 140641 Pg. 51	+	 14126 Pg. 72	
 ranger® AN3000 ranger® AN5000 10854 / 10992 Pg. 25	+	—	+	—	+	 14480 Pg. 52	+	 14894 Pg. 72 14479 Pg. 73	
 ranger® B 10555, 10445 Pg. 26 10840, 10841 Pg. 26	+	—	+	—	+	 15264F Pg. 50	+	 15844 Pg. 72 12025 Pg. 73	
 hotSHOCK® A 50 10613 Pg. 29	+	 14129 Pg. 75 14444 Pg. 76	+	 14143 Pg. 75	+	 140641 Pg. 52	+	 14126 Pg. 72	
 hotSHOCK® A 15 10638 Pg. 29	+	 14129 Pg. 75 14444 Pg. 76	+	 14143 Pg. 75	+	 140631 Pg. 52	+	 14125 Pg. 72	

Energiser		Transport box		Mounting		Solar module		Battery	
Part no.	Page	Part no.	Page	Part no.	Page	Part no.	Page	Part no.	Page
	+	—	+	—	+		+		15842 Pg. 70 15844 Pg. 73
hotSHOCK® ABN 5 10892 Pg. 30						14499 Pg. 44			
	+	—	+	—	+		+		14894 Pg. 72 14479 Pg. 73
farmer® AN 1000 10855 Pg. 34						14463 Pg. 53			
	+		+		+		+		14126 Pg. 72
farmer® AN 25 10897 Pg. 33		15466 Pg. 75 14444 Pg. 76		14143 Pg. 75		140641 Pg. 52			
	+		+		+		+		14125 Pg. 72
farmer® AN 15 10896 Pg. 33		15466 Pg. 75 14444 Pg. 76		14143 Pg. 75		140631 Pg. 53			
	+	—	+	—	+		+		15842 Pg. 73 15509 Pg. 70
farmer® ABN 4 10891 Pg. 35						14499 Pg. 44			
	+		+		+		+		14125 Pg. 72
equistop® A 2 10623 Pg. 38		15466 Pg. 75 14444 Pg. 76		14143 Pg. 75		140631 Pg. 53			
	+	—	+	—	+		+		15848 Pg. 70 15509 Pg. 70 15842 Pg. 73
equistop® B 10620 Pg. 39 10619 Pg. 39						60140 Pg. 50			
	+	—	+		+		+		14126 Pg. 72
CAMO 10932 Pg. 40				14143 Pg. 75		140641 Pg. 52			
	+	—	+	—	+		+		15848 Pg. 70 15509 Pg. 70 15842 Pg. 73
trapper® B 10616 Pg. 43						60140 Pg. 50			

Fence controller – control device for 12 Volt or 230 Volts 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 Volts and 12 Volt operated energiser
- Dry contact, closing when the fence voltage drops below a preset level
- Optical and acustical signal generator can be connected

Advantage: 2 in 1
Included in delivery!

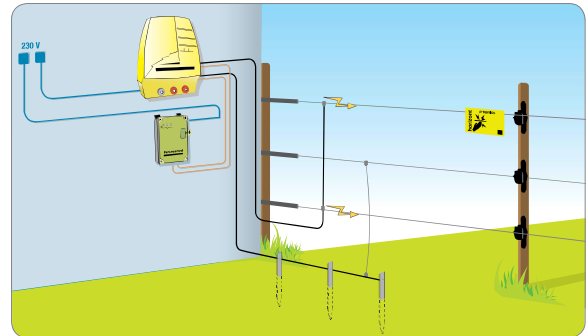
Fencecontrol combi allows the operation with 12 Volt batteries as well as with 230 Volts main power.



12 Volt / 230 Volts

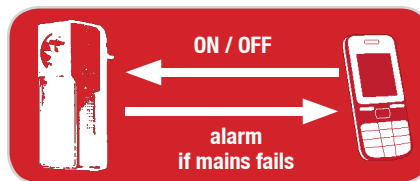
Part no. **10859UK** EAN **4 014803 108593**

- 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. **14936** EAN **4 260214 521555**

HIGHLIGHT ★★★★★

Luda Fence sensor

- The Luda Fence sensor monitors the voltage
- You receive notifications when the voltage drops below your set level, and alarms if there is a problem with your fence and the voltage drops significantly
- Luda Fence can be used anywhere if a GSM net is available



Part no. **34544** EAN **7 350030 453790**

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
- Measurements: 20cm x 10cm



text on both sides

Part no.	EAN	Piece
14127	4 014 803 14127 9	4
14127C	4 014 803 42611 6	4

text on one side*

Part no.	EAN	Piece
15317	4 014 803 15317 3	4
15317C	4 014 803 42038 1	4

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

* for example for use on fences besides buildings

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
- Measurements: 20cm x 10cm



text on both sides

Part no.	EAN	Piece
14481	4 014 803 14481 2	1

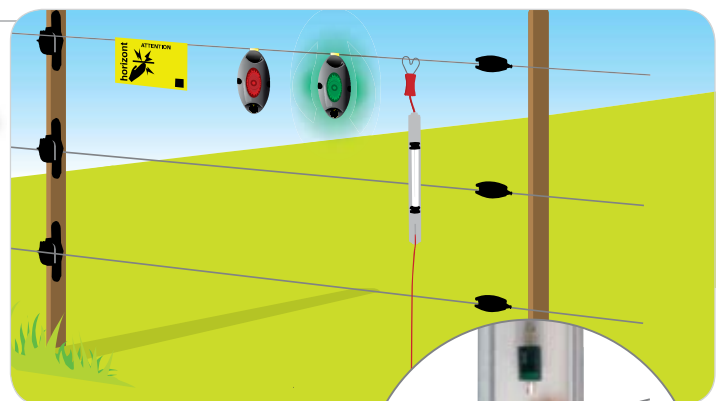
same as 14481, but with customer specific print**

Part no.	EAN	Piece
14482	4 014 803 14482 9	1

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



Operation without battery!

flashes if fence voltage is over
2 000 Volts

Part no.	EAN	Piece
10424C	4 014 803 40554 8	1

Volt-alarm

- This control device shows you the function of your fence
- To clip onto 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 **4 014803 428738** Piece **1**

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 onto 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

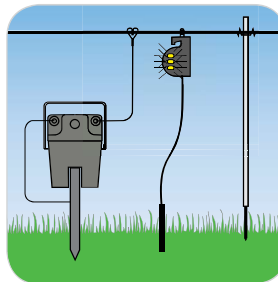
Part no. **14149C** EAN **4 014803 141491** Piece **1**

Including 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 **4 014803 428684** Piece **1**

Operating without battery!

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



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

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



Including battery!
Including bag !

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

Fence Voltmeter „ranger® Digital“

- Device is turning on automatically whilst in contact with fence voltage
- Battery (included in delivery) easy to change
- Nonslip isolation of the earth stake – additional operating security
- Cable can be wound around the fence tester if you don't use it. – Easy handling and additional protection against damage

Part no.	EAN	Piece
14496C	4014803144966	1

Including battery!



Fence Voltmeter „farmer® 7 LED“

- Sunken LED's for a best possible readability – even with strong daylight
- Sunken key-button to avoid unintentional operation (e.g. while stored in pocket).
- Battery (included in delivery) easy to change
- Battery control indication
- No grounding via earth cable necessary

Part no.	EAN	Piece
14495C	4014803144959	1

Including battery!



Fence Voltmeter „trapper® 6 Light“

- Sunken glow lamp for a best possible readability – even with strong daylight.
- Nonslip isolation of the earth stake – additional operating security
- Cable can be wound around the fence tester if you don't use it – easy handling and additional protection against damage
- Operation and delivery without battery

Part no.	EAN	Piece
14494C	4014803144942	1

Operating without battery!



HIGHLIGHT
★★★★★



Night watchman

- The night guardian – twin blinking LEDs mimic eyes in the night to ward off predators
- Solar panel charges the battery in the day and a sensor turns the LEDs on when the day grows dark
- Visibility for up to 800m

Part no.	EAN	Piece
14528	4014803145284	1



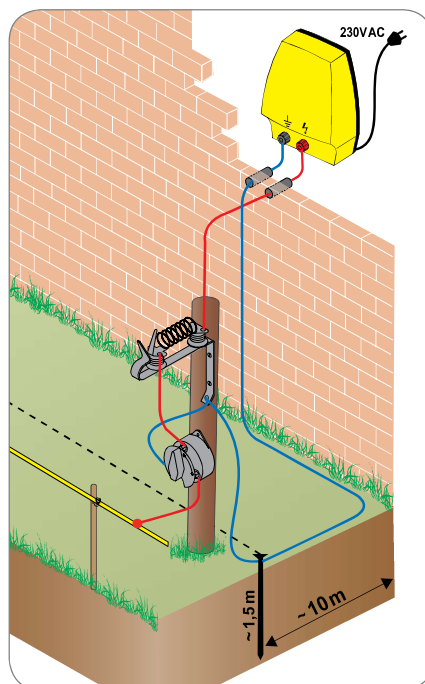


Lightning arrester kit (for larger installations)

- 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

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 154828	1
10319C	Cut-out switch, single	4 014803 405944	1

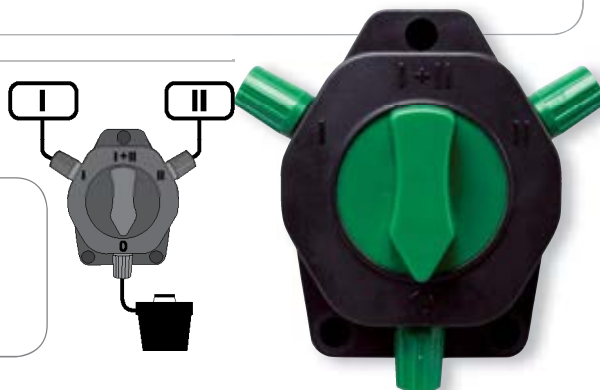
Safety hint!

Don't mount the energiser inside buildings next to flammable materials, for example in 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

- Positions of the switch:
 - 0 = off
 - I = fencing 1
 - II = fencing 2
 - I+II = fencing 1 and 2



Part no.	EAN	Piece
14865C	4 014803 148650	1

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

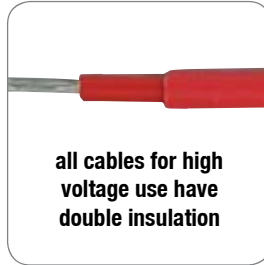
Part no.	EAN	Piece
14084C	4 014803 428691	1



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. **10286C** EAN **4 014803 405500** Piece **1**



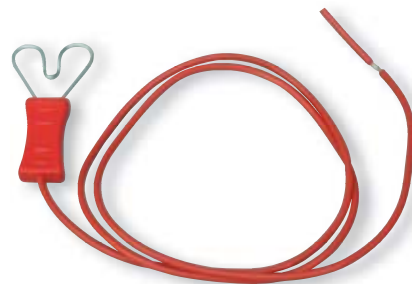
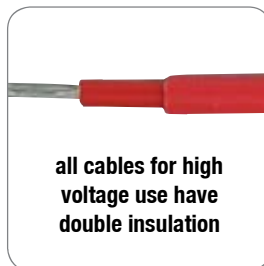
For safe contact – especially on higher energies!

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

without plug

Part no. **90676C** EAN **4 014803 405889** Piece **1**

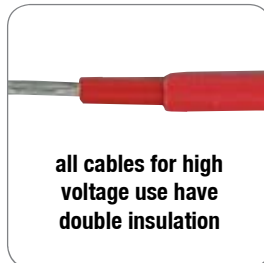


Line connection kit

- 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

without plug

Part no. **15522C** EAN **4 014803 405784** Piece **1**



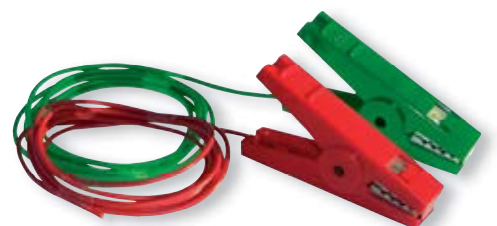
Safety hint!

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

Fence connecting kit

- The fence connecting kit consists of a connection cable (150cm) with a reinforced plastic cover and ring eyes
- The alligator clips can be connected to wire, twine, tape and rope as well as to earth stakes

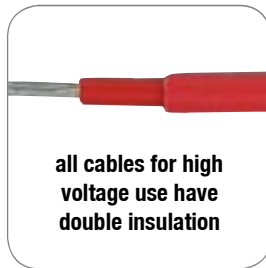
Part no. **14879** EAN **4 014803 414879** Piece **1**





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

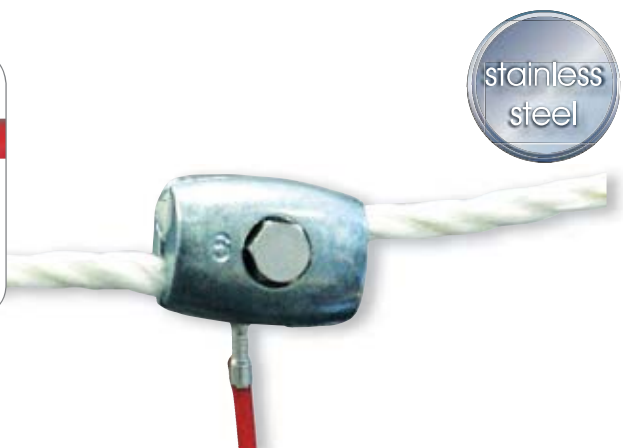
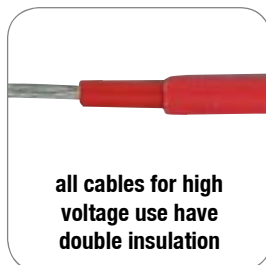


For safe contact – especially with higher energy for connection to tape!

Part no.	EAN	Piece
10447C	4 014803 405579	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

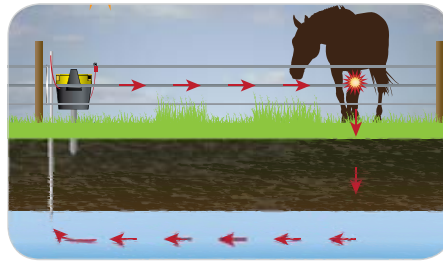
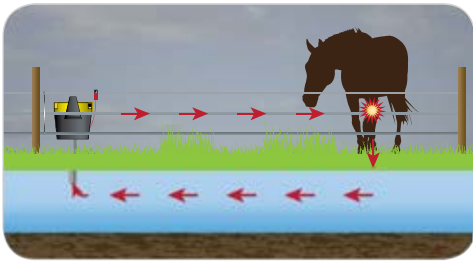
Part no.	EAN	Piece
10593C	4 014803 4105936	1

stainless steel

Part no.	EAN	Piece
10594C	4 014803 4105943	1

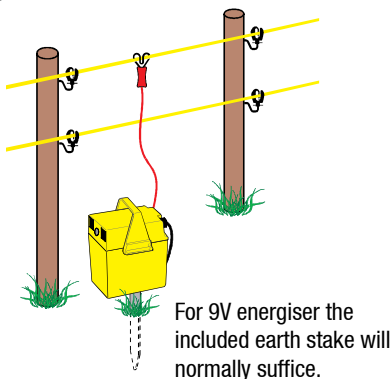
The earthing of an electric fence

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 horizont energiser will be sufficient. For battery energiser we recommend to use approximately 1 meter 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 meter apart and connect the earth posts with an earth cable.

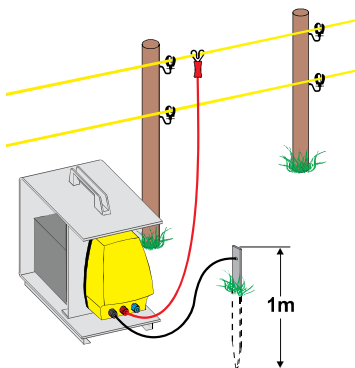


Hint!

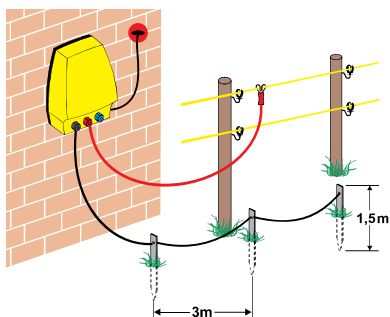
Compare quality of earth posts. horizont earth posts are made of 3mm galvanised steel and more solid than standard earth posts!



For 9V energiser the included earth stake will normally suffice.



For battery energiser take 1 meter 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 1m posts for all 12 Volt battery energiser and the solar energiser trapper® and farmer® AS
- We recommend 1.5m posts for all 230 Volts mains energisers

Total length 150cm, 3mm thick

Part no.	EAN	Piece
15017	4 014 803 150127	3
15017-1	4 014 803 434272	1

Total length 100cm, 3mm thick

Part no.	EAN	Piece
14041	4 014 803 140418	3
14041-1	4 014 803 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

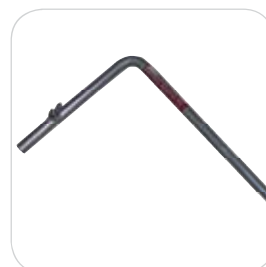
Part no.	EAN	Piece
14199	4 014 803 141996	3

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	4 014 803 143556	1

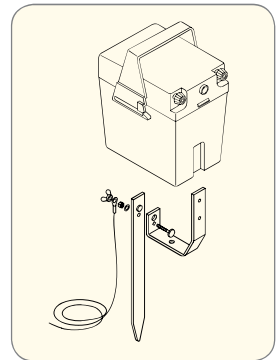




Earth stake with mounting rod

- This galvanized earth stake is supplied complete with screws and nuts
- Complete with bottom part (80054) and angle (83449)
Suitable for: 9V horizont energisers 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	4 014 803 88178 6	1
80054	Bottom part, single	4 014 803 88237 0	1
83449	Angle part, single	4 014 803 88238 7	1



Earth and point bearing pile

- Galvanized earth and point bearing pile including connection bolt
- Suitable for horizont energisers ABN 4 and hotSHOCK® ABN5

Art.-Nr.	EAN	Einheit
14498	4 014 803 14498 0	1

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



Earth stake

- All 9V energisers 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	4 014 803 14178 1	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

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

Length 66cm

Part no.	EAN	Piece
14899	4 014 803 14899 5	1

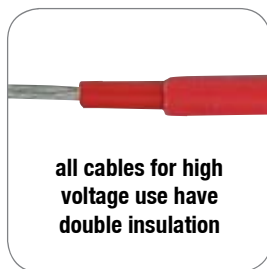
- Easy for setting up
- Easy for delivery
- Easy for use



Earth cable 90cm complete with screw

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

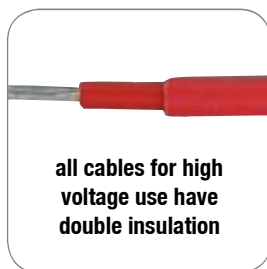
Part no. **90150C** EAN Piece
4 014803 005793 1



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. **15858C** EAN Piece
4 014803 158581 1



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. **15343** EAN Piece
4 014803 153432 Set



Flexible underground cable for gates and fences

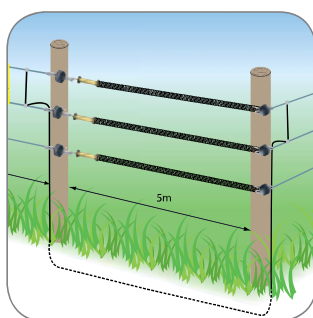
- This cable is used for the abovegrounded or undergrounded fence service connection, for the connection of earth stakes or the currency feed at fence gates
- The electric strength is about 20 000 Volts
- All types are double insulated and dispose of a copper conductor



Part no.	length of spool	∅	max. length of conductor	Ω / m	EAN	Piece
14523	8m	1.6mm	8m	0.01	4 014 803 145239	1
14524	50m	1.6mm	500m	0.01	4 014 803 145246	1

Underground 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



An electric fence gate should always be constructed with a gate handle set and an underground cable which is placed parallel. In this way the energy of the fence will be conducted through the underground cable in case of an open gate. Gate solutions can be electrified by a gate handle. The conductive material will be hinged to an insulator which is not connected to the fence. Thereby the gate will only be electrified if it is closed. Consequently a gate handle which is lying on the floor won't cause any deductions or disruptions.



Double insulated!



Part no.	length of spool	∅	max. length of conductor	Ω / m	EAN	Piece
15321	10m	1.6mm	500m	0.06	4 014 803 153210	1
14040	25m	1.6mm	500m	0.06	4 014 803 140401	1
15525	50m	1.6mm	500m	0.06	4 014 803 155252	1
15956	100m	1.6mm	500m	0.06	4 014 803 159564	1
15516	100m	2.5mm	1 000m	0.06	4 014 803 155160	1

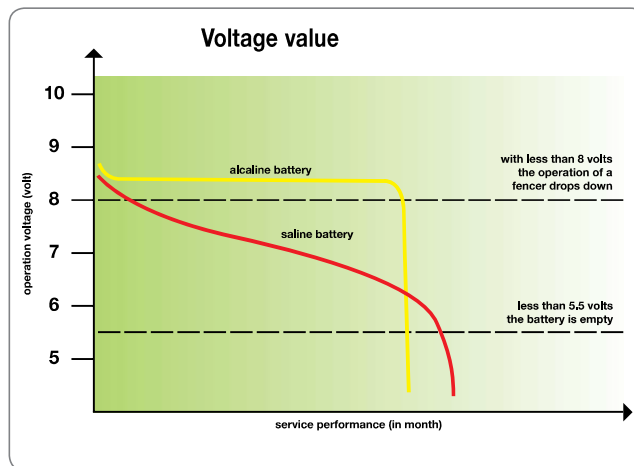
HINT !

For cable up to ∅ 1,6mm the insulating tube (part no. 15951, see p. 160) 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 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

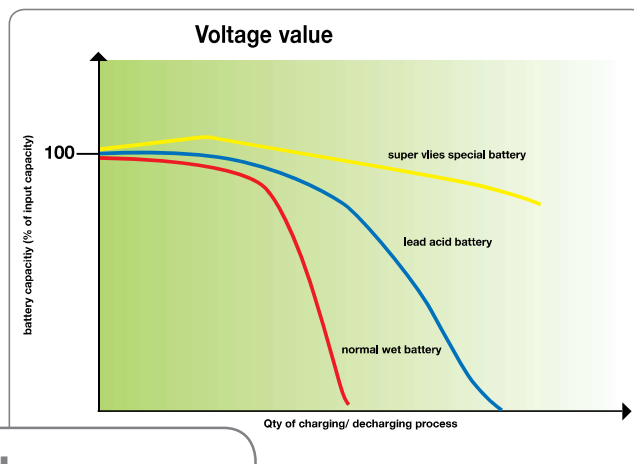
The difference between alkaline and saline dry batteries:



There are 2 different types of dry batteries, the alkaline and saline. Both types are cadmium and mercury free and therefore absolutely environmental 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 Volt 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 (l x w x h): 12.5 x 16.0 x 19cm
small housing (l x w x h): 11.0 x 11.5 x 16.5cm

Part no.	Product	EAN	Piece
14896	TURBOMAX AB200, 9V / 200Ah (big housing)	4 014 803 148964	1
12012	TURBOMAX AB170, 9V / 170Ah (big housing)	4 014 803 120120	1
120121P	TURBOMAX AB170, 9V / 170Ah (big housing)	4 014 803 440617	45
14057	TURBOMAX AB150, 9V / 150Ah (small housing)	4 014 803 140575	1
15844	TURBOMAX AB120, 9V / 120Ah (small housing)	4 014 803 158444	1
15509	TURBOMAX AB75, 9V / 75Ah (small housing)	4 014 803 155092	1
15848	TURBOMAX AB55, 9V / 55Ah (small housing)	4 014 803 158482	1

Hint!

Small and big battery housings fit 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 (l x w x h): 12.5 x 16.0 x 19cm
small housing (l x w x h): 11.0 x 11.5 x 16.5cm

Part no.	Product	EAN	Piece
15535	RANGER SB130, 9V / 130Ah (big housing)	4 014 803 155351	1
15004	RANGER SB90, 9V / 90Ah (big housing)	4 014 803 150042	1
15034	RANGER SB55, 9V / 55Ah (small housing)	4 014 803 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. 44)

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



Monobloc battery 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. 44)

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



Important hint for deep discharge!

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

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 will not deliver a sufficient level of charge to the fence which will impact upon security.

The horiSAMRT® AN160 is equipped with a deep discharge shut off, because of the higher energy consumption. 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. The battery should therefore be protected against damage. 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. Never recharge the battery later than at 80% discharge (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 an energiser is 180 mA, capacity of the battery: 100Ah → $100\text{Ah} : 0.18\text{A} = 555.5\text{h} : 24\text{h} = 23\text{ d}$.

* What means C20 and accordingly C100 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.

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. 74, 75)

Supply takes place without battery acid !



Part no.	Product	EAN	Piece
14124	12V / 63(C20)*Ah , without acid	4 014 803 141243	1
14894	12V / 85(C100)*Ah, without acid	4 014 803 148940	1
14125	12V / 88(C20)*Ah, without acid	4 014 803 141255	1
14126	12V / 100(C20)*Ah, without acid	4 014 803 141262	1
HIGHLIGHT ★★★★★	Akku 12V / 230(C20)*Ah (20h Charging time), 180Ah (5h Charging time), with acid	4 030 163 1534682	1
21264	Big lead acid box (800 x 450 x 292mm inside)	4 030 163 212640	1



14894

HIGHLIGHT
★★★★★



Big lead acid box (21264)

Part no.	Capacity	Measurement (l x w x h)	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

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



Battery acid

- Suitable for all 12 Volt lead acid batteries
- Sulfuric acid 37.5%
- Suitable for a first filling of dry precharged 12 Volt lead acid batteries

Part no.	Product	EAN	Piece
14688	battery acid, 1l	4 014 803 146885	1l

Safe handling of 12 volt batteries (wet cell battery or lead acid battery)

Lead acid battery operating instructions: Please wear protective clothing and protection goggles. Pay attention to a good aeration, corrosivity and a potential explosion hazard. Keep out of reach of children!
Please respect warning symbols on the battery!

Storage and transportation

- Before putting into operation: The special batteries are dry preloaded and do not require any maintenance in this state. Store cool (frost–free) and dry.
- Please pay attention to an upstanding transport and storage position to avoid an exit of acid.
- While transportation please assure that the battery isn't able to tip.
- The surface of the battery should be kept clean and dry. In order to avoid the formation of leakage currents that can cause significant self–discharge, oils and fluids should not be allowed to accumulate on the surface.
- Check the fill level of the battery and recharge if necessary. Battery shouldn't be discharged lower than 12 Volt (not lower than 12.5 Volt would be better)!

Initial operation

- While filling the battery with acid the temperature of both should be 10° C at least.
- Remove the closing plug. Take care of acid splashes!
- Fill up individual battery cells with acid sulphur (density 1.28 / 37.5 % acid sulphur) up to the marking level for acid or rather 5–15 mm over the top edge of the plaque.
- Don't move the battery for at least 15 minutes and tip it sideways several times. If necessary refill some acid. The first charging process should start after 60 minutes earliest.
- Tighten the closing plug. Remove acid splashes.

Positioning at / in the energiser

- Don't put on stony underground.
- Avoid short circuits caused by tools.
- Protect against atmospheric conditions (rain, sun or temperatures below 0°C).
- Pay attention to the right polarity of the battery while connecting the energiser.

Charging and maintenance of the battery

- Check the fill level of the battery regularly and top it up with purified water if necessary (never add battery acid)!
- Remove the closing plug before starting the charging process and tighten it strongly afterwards.
- Separate the battery from the energiser while charging.
- When charging the battery first connect it with the charging device and switch on afterwards. When finishing the process first switch off the charging device (Pay attention to the right polarity).
- Please control the fill level after the charging process and top it up with purified water up to the marking level or rather 5 mm over the top edge of the plaque.
- Please pay attention to an adequate aeration during the charging process. Protect yourself from acid splashes.
- Don't move the battery for at least 60 minutes after the charging process.

12 Volt Super Vlies special battery

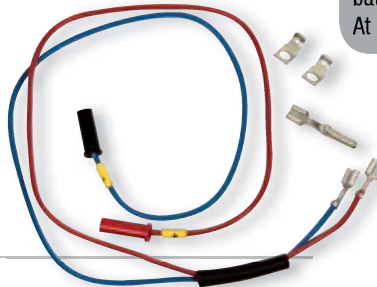
- The ideal, low-maintenance and rechargeable batteries, irrespective of its position
- Type 15842 (=12Ah) and Type 12025 (=27Ah) especially suitable for all battery-driven energisers – complete with 9V connection cable. Accumulators fit in the battery-casing
- Typ 14501 (=34Ah) especially suitable for battery-driven energisers farmer® ABN4 und hotSHOCK® ABN5
- Type 15128 (=45Ah) and 14479 (=80Ah) especially suitable for ranger® AN3000 and farmer® AN1000
- The energiser ranger® AN3000, farmer® AN1000 and all 9 Volt 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. 74, 75)



(12025)

Part no.	Product	Capacity	EAN	Piece
14479	12V/80Ah	C20*	4 014 803 144799	1
15128	12V/45Ah	C20*	4 014 803 151285	1
14501	12V/34Ah	C20*	4 014 803 145017	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 (l x w x h)	Acid
14479	80Ah	260 x 170 x 205mm	24.0kg
15128	45Ah	195 x 165 x 175mm	14.8kg
14501	34Ah	260 x 205 x 170mm	10,8kg
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, recharge regularly. At least every two month.

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 energisers 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































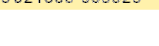













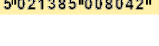







- Tester for measuring the voltage of batteries
- The tester indicates with 10 lamps the voltage of the battery up to 14V

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



230 Volt mains adaptor for horizont energisers and

Suitable for dual energisers

Product / Part no.	Energy	230Volt–power supply unit
 trapper® AS70 14983		Part no. EAN Piece 47BCUK  1
 trapper® AS35 14982		
 trapper® AS20 14981		
 farmer® AS70 14475		
 farmer® AN25 10637 (bis BJ 2013)		Part no. EAN Piece 97921UK  1
 farmer® AN15 10636 (bis BJ 2013)		
 farmer® AN25 10897 (ab BJ 2013)		Part no. EAN Piece 47PSU0008UK  1
 farmer® AN15 10896 (ab BJ 2013)		
 ranger® AN7000 10993		Part no. EAN Piece 47PSU0010FUK  1
 ranger® AN5000 10992		
 ranger® AN3000 10854		
 ranger® AN3000 GPS 10854GPSD		
 hotSHOCK® ABN5 10892		Part no. EAN Piece 47PSU0008FUK  1
 farmer® ABN4 10891		
 farmer® AN1000 10855		
 farmer® AN1000 Solar 10856		
 ranger® AN70 10857		Part no. EAN Piece 47PSU0010UK  1
 ranger® AN50 10858		
 trapper® AN24 10865		Part no. EAN Piece 47PSU0008UK  1
 trapper® AN12 10866		
 trapper® AN8 10867		Part no. EAN Einheit 47PSU0009UK  1
 trapper® AN8 10867		



(figure shows article 97921)

Digital charging unit CHARGE BOX 3.6


- Suitable for all 12V lead acid batteries and 12V super–vies special batteries from 1.2 up to 120Ah
- 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		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	4 260 173 030037	1

Battery-Guard

- With this product and its free app you are able to control the state of charge of batteries via your smartphone
- Monitoring of 12 and 9 volts is possible
- The app is compatible with iPhone (starting from 4S), Android 4.3 and Windows 10
- Power consumption approx. 6 to 24mW



Part no.	Product	EAN	Piece
14525	Battery-Guard	4 260 227 563124	1

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
- 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	4 014 803 144447	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. 53–55)
- The drift angle of solar modules can be altered from 15 up to 75 degrees
- Complete with attachment screws

Part no.	EAN	Piece
14143	4 014 803 141439	1



insulated key



(Battery and energiser are not included in delivery.)



Large metal transport box

- Large metal transport box for easy transport of 9V battery and 12V energisers
- With handle
- Metal transport box can be fitted with an attachment fixture for solar panels (see p. 75)
- Ideal for 12V batteries 63Ah and 85Ah



Part no.	Product	EAN	Piece
14129	for models like horiSMART®, farmer®, ranger®, hotSHOCK®, equistop® and Camo®	4 014 803 141 293	1

(Battery and energiser are not included in delivery.)

Fence material and accessories

HIGHLIGHT



Create connections
Do not knot! Connect
electrical conductive!
> see p. 100, 104

Good visibility of the fence material helps the animal to accept the fence line as a barrier and helps maintain a secure fence . High conductivity ensures perfect transport of the energy.



HIGHLIGHT



Super conductive
TURBOMAX–tape for a secure
fencing of your horses.
> page 97



HIGHLIGHT



Good connection
Tape connector instead of knots to
secure a good connection.
> page 103









































































































HIGHLIGHT




































Small and strained
Tidy strained twines instead of
sagging fence material.
> page 105

Chapter	Page
Fence material I Product guide I overview	78 – 82
Fence material I Tapes	83 – 87
Fence material I Twines	88 – 92
Fence material I Wires	93 – 94
Fence material I Ropes	96 – 99
Fence material I Horse rug	100 – 101
Fence material I Connection and tightening	100 – 106

Series	type	Product	Max rec. fence length										Width / Ø
			Mains-/Accumulator energiser 	Battery energiser 									
turbomax	Tape	TURBOMAX T12	17 000 m	5 600 m	-					-	-		12 mm
		TURBOMAX T20	16 500 m	5 500 m	-					-	-		20 mm
		TURBOMAX T40	23 000 m	7 700 m						-	-		40 mm
	Twine	TURBOMAX W6	18 500 m	6 100 m	-					-	-	-	
		TURBOMAX W9	19 000 m	6 300 m	-					-	-	-	
		TURBOMAX W12	23 500 m	8 000 m	-					-	-	-	
	Rope	TURBOMAX R6-PE	16 000 m	5 300 m	-		-			-	-		6 mm
		TURBOMAX R7-PE	16 000 m	5 300 m	-		-			-	-		7 mm
		BRAIDED ROPE D3	18 000 m	5 900 m	-		-				-		3 mm
		BRAIDED ROPE D5,5	23 500 m	8 000 m	-		-				-		5.5 mm

ranger®	Tape	RANGER T12-W	13 000 m	4 300 m	-					-	-		12 mm
		RANGER T12-O	13 000 m	4 300 m	-					-	-		12 mm
		RANGER FLUO T12	13 000 m	4 300 m	-					-	-		12 mm
		RANGER T20-W	13 500 m	4 500 m	-					-	-		20 mm
		RANGER T40-W	14 500 m	4 800 m						-	-		40 mm
	Twine	RANGER W3-O	12 000 m	4 000 m	-					-	-	-	
		RANGER W3-W	12 000 m	4 000 m	-					-	-	-	
		RANGER FLUO W3	12 000 m	4 000 m	-					-	-	-	
	Rope	RANGER R6	14 000 m	4 600 m	-					-	-	-	5-6 mm
		RANGER FLUO R6	14 000 m	4 600 m	-					-	-	-	5-6 mm

hotSHOCK®	Tape	HOTSHOCK T12	10 000 m	3 300 m	-		-			-	-		12 mm
	Twine	HOTSHOCK W6	12 000 m	4 000 m	-				-	-	-		
		HOTSHOCK W9	14 500 m	5 000 m	-				-	-	-		

GREEN power-line	Tape	GREEN-POWER T12	12 000 m	4 000 m	-		-			-	-		12 mm
		GREEN-POWER T20	13 500 m	4 500 m	-		-			-	-		20 mm
		GREEN-POWER T40	14 500 m	4 800 m			-			-	-		40 mm
	Twine	GREEN-POWER W3	12 000 m	4 000 m	-					-	-	-	
	Rope	GREEN-POWER R6	14 000 m	4 600 m	-					-	-	-	5-6 mm

breaking load	Con- ductors	Types of conductor							Resistance	Spool	Page
		stainless steel	ironwire galvanized	aluminium	Copper						
~ 60 kg	6	0.20 mm				0.30 mm			0.14 Ω/m	200 m	85
~ 140 kg	8	0.20 mm				0.25 mm			0.15 Ω/m	200 m	85
~ 240 kg	12	0.20 mm				0.25 mm			0.09 Ω/m	200 m	85
~ 180 kg	6					0.30 mm			0.12 Ω/m	200 / 400 / 1 000 m	90
~ 200 kg	9					0.25 mm			0.11 Ω/m	200 / 400 / 1 000 m	90
~ 220 kg	12					0.25 mm			0.08 Ω/m	200 / 400 / 1 000 m	90
~ 500 kg	6					0.25 mm			0.17 Ω/m	200 / 400 / 800 m	97
~ 600 kg	6					0.25 mm			0.17 Ω/m	200 / 400 m	97
~ 200 kg	6	0.15 mm							0.13 Ω/m	200 m	97
~ 600 kg	6	0.20 mm							0.09 Ω/m	200 m	97

~ 60 kg	4					0.22 mm			0.33 Ω/m	200 m	86
~ 60 kg	4					0.22 mm			0.33 Ω/m	200 m	86
~ 60 kg	4					0.22 mm			0.33 Ω/m	200 m	86
~ 120 kg	5					0.22 mm			0.27 Ω/m	200 m	86
~ 180 kg	8					0.22 mm			0.20 Ω/m	200 m	86
~ 160 kg	3					0.25 mm			0.35 Ω/m	200 / 400 / 1 000 m	91
~ 160 kg	3					0.25 mm			0.35 Ω/m	200 / 400 / 1 000 m	91
~ 160 kg	3					0.25 mm			0.35 Ω/m	200 / 400 m	91
~ 350 kg	6					0.22 mm			0.22 Ω/m	200 / 400 m	98
~ 350 kg	6					0.22 mm			0.22 Ω/m	200 m	98

~ 100 kg	4						0.30 mm		0.533 Ω/m	250 m	86
~ 100 kg	6						0.30 mm		0.356 Ω/m	200 / 400 m	92
~ 120 kg	9						0.30 mm		0.237 Ω/m	200 / 400 m	92

~ 60 kg	3					0.25 mm			0.35 Ω/m	200 m	87
~ 120 kg	5					0.22 mm			0.27 Ω/m	200 m	87
~ 180 kg	8					0.20 mm			0.20 Ω/m	200 m	87
~ 160 kg	3					0.25 mm			0.35 Ω/m	200 m	92
~ 350 kg	6					0.22 mm			0.22 Ω/m	200 / 400 m	99



































perfectly suitable


























































conditionally suitable




















































not recommended

Series	type	Product	Max rec. fence length										Width / Ø
			Mains-/Accumulator energiser 	Battery energiser 									
hobbygard / equistop	Tape	HOBBYGARD T8	12 000 m	4 000 m	-	-		-			-	-	8 mm
		EQUISTOP T20	13 000 m	4 300 m	-							-	20 mm
		EQUISTOP T30	14 000 m	4 600 m	-							-	30 mm
		EQUISTOP T40	14 500 m	4 800 m								-	40 mm

	Tape	HAPPY NT 2.0	13 000 m	4 300 m	-		-						20 mm
		HAPPY NT 4.0	14 500 m	4 800 m			-						40 mm

farmer®	Tape	FARMER T10	1 800 m	500 m	-					-	-		10 mm
		FARMER T20	2 500 m	800 m	-					-	-		20 mm
		FARMER T40	3 300 m	1 100 m						-	-		40 mm
	Twine	FARMER W3	3 000 m	900 m	-								
		FARMER W6	3 500 m	1 100 m	-								
		FARMER W9	4 500 m	1 500 m	-								
Rope	FARMER R6	4 000 m	1 300 m	-		-				-	-	6 mm	

trapper®	Twine	TRAPPER W3	1 800 m	500 m	-				-	-	-		
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WIRES	DEDERON WIRE	12 000 m	4 000 m	-					-		-	
	HORILITZE	12 000 m	4 000 m	-					-		-	
	RANGER TWIST	6 000 m	2 000 m	-							-	
	HIGHTENSILE WIRE GALVADUR	30 000 m	11 000 m	-					-			
	GALVADUR	26 000 m	8 700 m	-					-			
	STEEL WIRE	28 000 m	9 400 m	-			-				-	
	STRANDED STEEL WIRE	18 500 m	6 100 m	-				-	-	-	-	
	MIXAL, 1.8mm Ø	35 000 m	12 000 m	-				-	-	-		
	MIXAL, 2.5mm Ø	40 000 m	18 000 m	-				-	-	-		
	DEDERON WIRE (STEUER)	12 000m	4 000m	-				-	-	-	-	

breaking load	Con-ductors	Types of conductor							Resistance	Spool	Page
		stainless steel	ironwire galvanized	aluminium	Copper	TLDmax	TLDmax	TBmax			
~ 30 kg	3							0.25 mm	0.35 Ω/m	100 m	87
~ 150 kg	4							0.22 mm	0.33 Ω/m	200 m	88
~ 220 kg	6							0.22 mm	0.22 Ω/m	200 m	88
~ 260 kg	8							0.20 mm	0.20 Ω/m	200 m	88

~ 130 kg	4							0.22 mm	0.33 Ω/m	200 m	88
~ 180 kg	8							0.20 mm	0.20 Ω/m	200 m	88

~ 40 kg	3	0.15 mm							14.40 Ω/m	200 / 2 x 200 m	89
~ 90 kg	4	0.15 mm							10.80 Ω/m	200 / 2 x 200 m	89
~ 120 kg	8	0.15 mm							5.40 Ω/m	200 m	89
~ 50 kg	3	0.18 mm							9.99 Ω/m	250 m	93
~ 60 kg	6	0.18 mm							4.98 Ω/m	250 / 400 m	93
~ 70 kg	9	0.18 mm							3.33 Ω/m	250 / 400 m	93
~ 250 kg	6	0.20 mm							4.05 Ω/m	200 / 400 m	99

~ 30 kg	3	0.15 mm							14.40 Ω/m	250 / 500 m	93
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~ 30 kg	2		0.50 mm						0.35 Ω/m	500 / 1000 m	94
~ 30 kg	2		0.50 mm						0.35 Ω/m	1000 m	94
~ 30 kg	1		0.50 mm						0.70 Ω/m	200 m	95
~ 500 kg	1	2.50 mm							0.04 Ω/m	625 m	95
~ 200 kg	1	1.60 mm							0.06 Ω/m	315 m	95
~ 500 kg	1	1.80 mm							0.05 Ω/m	250 m	96
~ 200 kg	7	0.50 mm							0.12 Ω/m	200 / 400 m	96
~ 75 kg	1			1.80 mm					0.01 Ω/m	250 m	95
~ 150 kg	1			2.50 mm					0.006 Ω/m	400 m	95
~ 30 kg	2	0.50 mm							0.35 Ω/m	500 / 1000 m	94



perfectly suitable



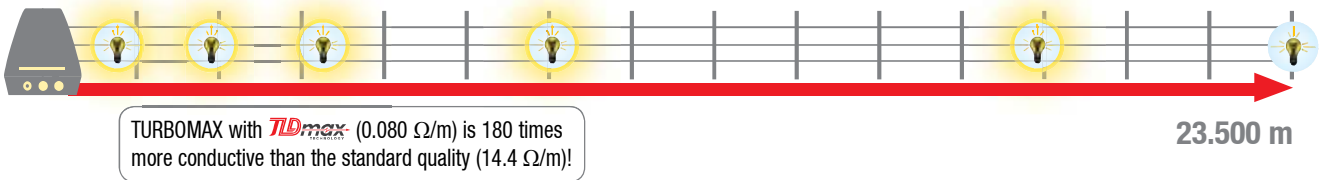
conditionally suitable



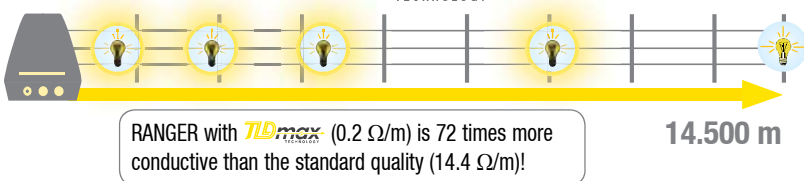
not recommended



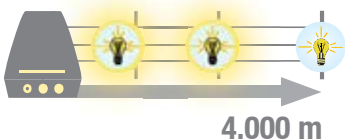
TURBOMAX *TLDmax*
TECHNOLOGY



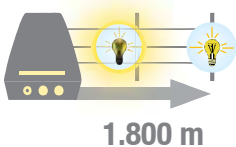
RANGER *TLDmax*
TECHNOLOGY



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

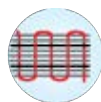
Never knot your tape!

- 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

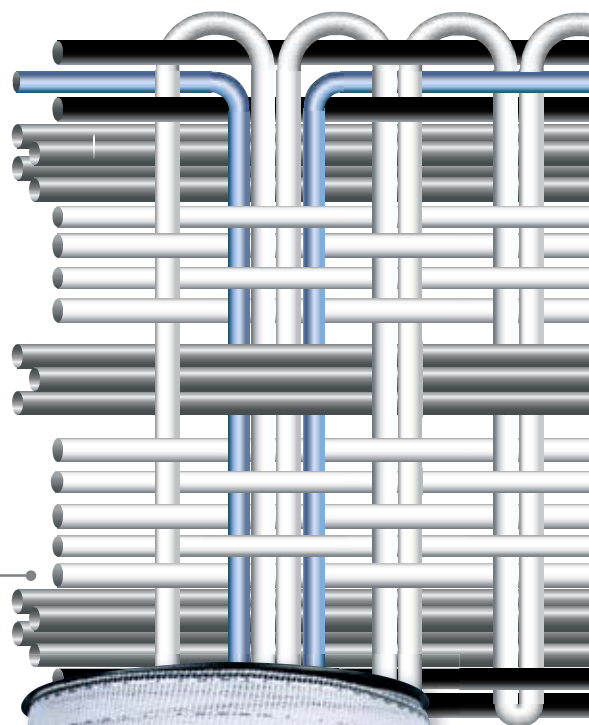


Turbomax (0.09Ω/m) is 160 times more conductive than the standard quality (14.4Ω/m)!

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



Polyethylene monofilaments ensures long-levity



TURBOMAX

- Excellent conductivity is achieved with the newly designed conductors of **TLDmax**
- High performance can 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
- **TLDmax** conductors are extremely weather resistant
- High breaking loads are reached with high-quality plastic monofilaments
- 5 years warranty for UV-stability

HIGHLIGHT
★★★★★



Part no.	Product	Width	Colour	Spool	EAN	Piece
17110	TURBOMAX T12	12mm	black/white/black	200m	4 014 803 171108	1
17111	TURBOMAX T20	20mm	black/white/black	200m	4 014 803 171115	1
17112	TURBOMAX T40	40mm	black/white/black	200m	4 014 803 171122	1



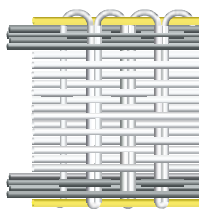
	Width	Spool	Conduc-tors	Diameter stainless steel	TLDmax TECHNOLOGY	Resistance	~60kg	Max rec. fence length		18
								main energiser	dry battery energiser*	
17110	12mm	200m	6	0.20mm	0.3mm	0.14Ω/m	~60kg	17 000m	5 600m	18
17111	20mm	200m	8	0.20mm	0.25mm	0.15Ω/m	~140kg	16 500m	5 500m	8
17112	40mm	200m	12	0.20mm	0.25mm	0.09Ω/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.

With yellow outer edges for better visibility

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

Up to 72 times (0.2 Ω/m) more conductive than the standard quality (14.4 Ω/m)



RANGER **TLDmax** TECHNOLOGY

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



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 171148	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

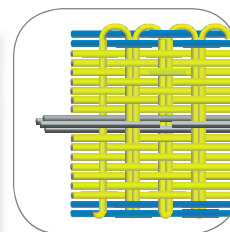


HIGHLIGHT



RANGER FLUO **TLDmax** TECHNOLOGY

- The tape Ranger Fluo is very visible because of its fluorescent colour
- Especially visible in front of dark backgrounds, like woodland
- 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

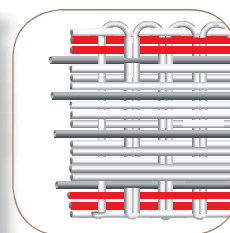


Part no.	Product	Width	Colour	Spool	EAN	Piece
17116	RANGER FLUO T12	12mm	fluorescent acting	200m	4 014803 171160	1



Tape hotSHOCK **TBmax** TECHNOLOGY

- Polyethylen monofilaments with a high UV–protection
- 5 times higher conductivity than stainless steel conductors
- High durability by additional protection
- Especially made for strong energisers (for instance sheep protection, wild animal protection)
- 3 years warranty



Part no.	Product	Width	Colour	Spool	EAN	Piece
17202	hotSHOCK	12mm	white/red/white	200m	4 014803 172020	1

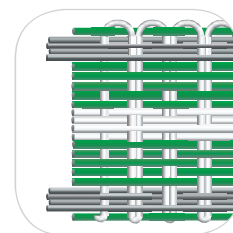


	Width	Spool	Conduc-tors	TBmax	TLDmax	Resistance		Max rec. fence length		
								main energiser	dry battery energiser*	
17113	12mm	200m	4	–	0.22mm	0.33Ω/m	~60kg	13 000m	4 300m	18
17114	20mm	200m	5	–	0.22mm	0.27Ω/m	~120kg	13 500m	4 500m	8
17115	40mm	200m	8	–	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	8
17117	12mm	200m	4	–	0.22mm	0.33Ω/m	~60kg	13 000m	4 300m	18
17202	12mm	250m	4	0.30mm	–	0.533Ω/m	~100kg	10.000m	3 300m	16

* 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



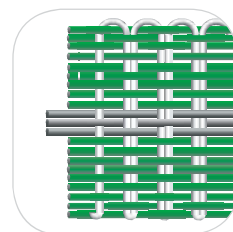
Part no.	Product	Width	Colour	Spool	EAN	Piece
17118	GREEN-POWER T12	12mm	green	200m	4 014 803 171184	1
17119	GREEN-POWER T20	20mm	green	200m	4 014 803 171191	1
17120	GREEN-POWER T40	40mm	green	200m	4 014 803 171207	1



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	4 014 803 171269	1

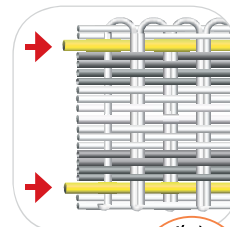


Part no.	Width	Spool	Conduc-tors	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
							main fences	dry battery fencers* ²	
17118	12mm	200m	3	0.25mm	0.35Ω/m	~60kg	12 000m	4 000m	18
17119	20mm	200m	5	0.22mm	0.27Ω/m	~120kg	13 500m	4 500m	15
17120	40mm	200m	8	0.20mm	0.2Ω/m	~180kg	14 500m	4 800m	8
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 !

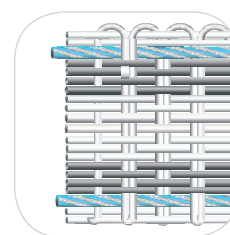
Part no.	Product	Width	Colour	Spool	EAN	Piece
17121	EQUISTOP T20–W	20mm	white	200m	4 014 803 171214	1
17122	EQUISTOP T20–B	20mm	brown	200m	4 014 803 171221	1
17123	EQUISTOP T30–G	30mm	green	200m	4 014 803 171238	1
17124	EQUISTOP T40–W	40mm	white	200m	4 014 803 171245	1
17125	EQUISTOP T40–B	40mm	brown	200m	4 014 803 171252	1

PE



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	4 014 803 444677	1
17136LI	Happy NT2.0	20mm	purple/white/purple	200m	4 014 803 444684	1
17136TU	Happy NT2.0	20mm	turquoise/white/turquoise	200m	4 014 803 444691	1
17137HG	Happy NT4.0	40mm	lime/white/lime	200m	4 014 803 444707	1
17137LI	Happy NT4.0	40mm	purple/white/purple	200m	4 014 803 444714	1
17137TU	Happy NT4.0	40mm	turquoise/white/turquoise	200m	4 014 803 444721	1

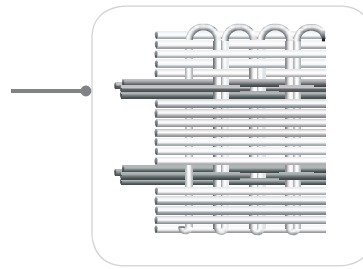
PE



Part no.	Width	Spool	Conduc-tors	TLDmax TECHNOLOGY	Resistance		Max rec. fence length			
							main fences	dry battery fences*		
17121	20mm	200m	4		0.22mm	0.33Ω/m	~150kg	13000m	4 300m	8
17122	20mm	200m	4		0.22mm	0.33Ω/m	~150kg	13000m	4 300m	8
17123	30mm	200m	6		0.22mm	0.22Ω/m	~220kg	14000m	4 600m	6
17124	40mm	200m	8		0.20mm	0.2Ω/m	~260kg	14500m	4 800m	4
17125	40mm	200m	8		0.20mm	0.2Ω/m	~260kg	14500m	4 800m	4
17136HG	20mm	200m	4		0.22mm	0.33Ω/m	~130kg	13000m	4 300m	8
17136LI	20mm	200m	4		0.22mm	0.33Ω/m	~130kg	13000m	4 300m	8
17136TU	20mm	200m	4		0.22mm	0.33Ω/m	~130kg	13000m	4 300m	8
17137HG	40mm	200m	8		0.20mm	0.2Ω/m	~180kg	14500m	4 800m	4
17137LI	40mm	200m	8		0.20mm	0.2Ω/m	~180kg	14500m	4 800m	4
17126TU	40mm	200m	8		0.20mm	0.2Ω/m	~180kg	14500m	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.

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.

Part no.	Product	Width	Colour	Spool	EAN	Piece
17451	FARMER T10-W	10mm	white	200m	4 014 803 174512	1
17287	FARMER T10-O	10mm	yellow/orange	200m	4 014 803 172877	1
17475	FARMER T20-W	20mm	white	200m	4 014 803 174758	1
17475GR	FARMER T20-G	20mm	green	200m	4 014 803 174759	1
17528	FARMER T20-O	20mm	yellow/orange	200m	4 014 803 175281	1
17458	FARMER T40-W	40mm	white	200m	4 014 803 174581	1
17458GR	FARMER T40-G	40mm	green	200m	4 014 803 174582	1

FARMER in double packs

Part no.	Product	Width	Colour	Spool	EAN	Piece
17271	FARMER T10-W	10mm	white	2 x 200m	4 014 803 172716	1
17272	FARMER T20-W	20mm	white	2 x 200m	4 014 803 172723	1
17273	FARMER T10-O	10mm	yellow/orange	2 x 200m	4 014 803 172730	1
17274	FARMER T20-G	20mm	yellow/orange	2 x 200m	4 014 803 172747	1



Part no.	Width	Spool	Con- ductors	Diametre stainless steel	Resistance		Max rec. fence length		
							main fences / 12V*	dry battery 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.



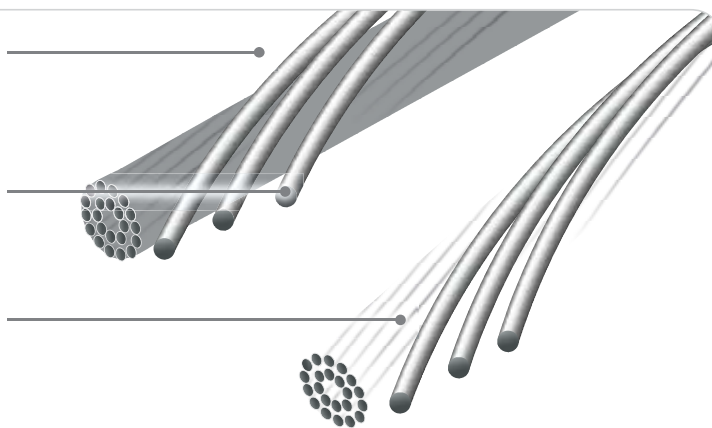
Turbomax (0.080Ω/m) is 180 times more conductive than the standard quality (14.4Ω/m)!



TLDmax conductors for best conductivity and highest breaking strength



Monofilaments with highest UV-protection



TURBOMAX

- **TLDmax** conductors provide maximum conductivity and a high tensile strength among all Turbomax strength
- The high number of **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



Part no.	Product	Conductors	Colour	Spool	EAN	Piece
17140	TURBOMAX W6	6	white/black/white	200m	4 014 803 171405	1
17140-400	TURBOMAX W6	6	white/black/white	400m	4 014 803 437891	1
17140-1000	TURBOMAX W6	6	white/black/white	1000m	4 014 803 437907	1
17141	TURBOMAX W9	9	white/black/white	200m	4 014 803 171412	1
17141-400	TURBOMAX W9	9	white/black/white	400m	4 014 803 437914	1
17141-1000	TURBOMAX W9	9	white/black/white	1000m	4 014 803 437921	1
17142	TURBOMAX W12	12	white/black/white	200m	4 014 803 171429	1
17142-400	TURBOMAX W12	12	white/black/white	400m	4 014 803 437938	1
17142-1000	TURBOMAX W12	12	white/black/white	1000m	4 014 803 437945	1



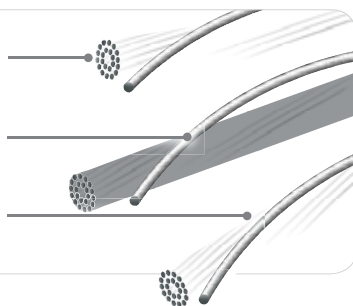
Part no.	Spool	Conductors	Resistance	Weight	Max rec. fence length		Icon
					main fences	dry battery fences*	
17140	200m	6	0.30mm 0.12Ω/m	~180kg	18500m	6100m	18
17140-400	400m	6	0.30mm 0.12Ω/m	~180kg	18500m	6100m	8
17140-1000	1000m	6	0.30mm 0.12Ω/m	~180kg	18500m	6100m	4
17141	200m	9	0.25mm 0.11Ω/m	~200kg	19000m	6300m	18
17141-400	400m	9	0.25mm 0.11Ω/m	~200kg	19000m	6300m	8
17141-1000	1000m	9	0.25mm 0.11Ω/m	~200kg	19000m	6300m	4
17142	200m	12	0.25mm 0.08Ω/m	~220kg	23500m	8000m	18
17142-400	400m	12	0.25mm 0.08Ω/m	~220kg	23500m	8000m	8
17142-1000	1000m	12	0.25mm 0.08Ω/m	~220kg	23500m	8000m	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 Ω/m) than the standard quality
(14.4 Ω/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

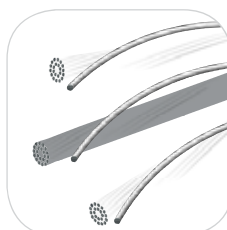


Part no.	Product	Con- ductors	Colour	Spool	EAN	Piece
17143	RANGER W3-O	3	orange/grey/orange	200m	4 014 803 4171436	1
17143-400	RANGER W3-O	3	orange/grey/orange	400m	4 014 803 437952	1
17143-1000	RANGER W3-O	3	orange/grey/orange	1000m	4 014 803 437969	1
17144	RANGER W3-W	3	orange/grey/orange	200m	4 014 803 4171443	1
17144-400	RANGER W3-W	3	orange/grey/orange	400m	4 014 803 437976	1
17144-1000	RANGER W3-W	3	orange/grey/orange	1000m	4 014 803 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	Con- ductors	Colour	Spool	EAN	Piece
17145	RANGER FLUO W3	3	fluorescent acting	200m	4 014 803 4171450	1
17145-400	RANGER FLUO W3	3	fluorescent acting	400m	4 014 803 438058	1



Part no.	Spool	Conduc- tors:	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
						main fences	dry battery fences*	
17143	200m	3		0.35Ω/m	~160kg	12000m	4000m	32
17143-400	400m	3		0.35Ω/m	~160kg	12000m	4000m	18
17143-1000	1000m	3		0.35Ω/m	~160kg	12000m	4000m	4
17144	200m	3		0.35Ω/m	~160kg	12000m	4000m	32
17144-400	400m	3		0.35Ω/m	~160kg	12000m	4000m	18
17144-1000	1000m	3		0.35Ω/m	~160kg	12000m	4000m	4
17145	200m	3		0.35Ω/m	~160kg	12000m	4000m	32
17145-400	400m	3		0.35Ω/m	~160kg	12000m	4000m	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.

Twine hotSHOCK **TBmax** TECHNOLOGY **NEW**

- Polyethylene monofilaments with high UV-protection
- 5 times higher conductivity than stainless steel conductors
- High durability
- Especially made for strong energisers (for instance sheep or wild animal protection)
- 3 years warranty



Part no.	Product	Con-ductors	Colour	Spool	EAN	Piece
17203	hotSHOCK W6	6	white/red/white	250m	4 014 803 172037	1
17208	hotSHOCK W6	6	white/red/white	400m	4 014 803 172082	1
17204	hotSHOCK W9	9	white/red/white	250m	4 014 803 172044	1
17209	hotSHOCK W9	9	white/red/white	400m	4 014 803 172099	1



GREEN power-line **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
- 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	4 014 803 171467	1

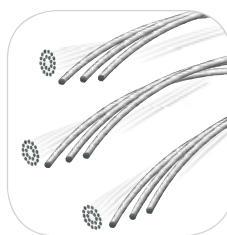


Part no.	Product	Spool	Con-ductors	Resistance	Weight	Max rec. fence length		Pieces
						main fences / 12V*	dry battery fences*	
17203	hotSHOCK W6	250m	6	0.356Ω/m	~100kg	12000m	4000m	20
17204	hotSHOCK W9	400m	9	0.237Ω/m	~120kg	14500m	5000m	18
17208	hotSHOCK W6	250m	6	0.356Ω/m	~100kg	12000m	4000m	50
17209	hotSHOCK W9	500m	9	0.237Ω/m	~120kg	14500m	5000m	24
17146	GREEN POWER W3	200m	3	0.350Ω/m	~160kg	12000m	4000m	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.

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	4 014 803 153463	1
15282	FARMER W6-W	6	white	250m	4 014 803 152824	1
15283	FARMER W6-W	6	white	400m	4 014 803 152831	1
15347	FARMER W9-W	9	white	250m	4 014 803 153470	1
15277	FARMER W9-W	9	white	400m	4 014 803 152770	1
15345	FARMER W3-O	3	yellow/orange/yellow	250m	4 014 803 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	4 014 803 155672	1
15849	TRAPPER W3	3	yellow/orange/yellow	500m	4 014 803 158499	1



Part no.	Spool	Con-ductors	Diametre stainless steel	TLDmax TECHNOLOGY	Resistance		Max rec. fence length		
							main fences / 12V*	dry battey fences*	
15345	250m	3	0.18mm	-	9.99Ω/m	~50kg	3 000m	900m	32
15346	250m	3	0.18mm	-	9.99Ω/m	~50kg	3 000m	900m	32
15282	250m	6	0.18mm	-	4.98Ω/m	~60kg	3 500m	1 100m	32
15283	400m	6	0.18mm	-	4.98Ω/m	~60kg	3 500m	1 100m	18
15347	250m	9	0.18mm	-	3.33Ω/m	~70kg	4 500m	1 500m	20
15277	400m	9	0.18mm	-	3.33Ω/m	~70kg	4 500m	1 500m	18
15567	250m	3	0.15mm	-	14.4Ω/m	~30kg	1 800m	500m	50
15849	500m	3	0.15mm	-	14.4Ω/m	~30kg	1 800m	500m	24

* 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



Original „Steuer“ wire – bound to tradition!

- High tensile strength (without any loss of conductivity)
- small electric resistance (0.36 Ohm / m)
- safe passage of impulse to the animal
- Plastic core ø 1.5mm
- Entwined with 2 special conductors
- Galvanized metal wire

- The electric wire type „Steuer“ has enjoyed an excellent reputation for more than 60 years. Especially within the newly-formed German states its advantages are well-known therefore the “Steuer” wire is in high demand.
- horizont has succeeded in continuing the success of this product with the accustomed original quality. The original „Steuer“ wire is produced in Wittgensdorf / Saxony and distributed by horizont exclusively. Therefore the preservation as well as the enhancement of the product can be ensured.



1000m

Part no.	EAN	Piece
14505-1000	4014803450715	1

500m

Part no.	EAN	Piece
14505-500	4014803146055	1



Dederon wire „Original Steuer“

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



1000m

Part no.	EAN	Piece
15833S	4014803426420	1

500m

Part no.	EAN	Piece
15531S	4014803426413	1



Part no.	Spool	Conduc-tors	HIGH TENSILE	Diameter stainless steel	Resistance		Max rec. fence length		
							main fences	main fences	
14505-1000	1000m	2		0.5mm	0.36Ω/m	~30kg	12000m	4 000m	1
14505-500	5000m	2		0.5mm	0.36Ω/m	~30kg	12000m	4 000m	1
15833S	1 000m	2		0.5mm	0.35Ω/m	~30kg	12000m	4 000m	1
15531S	500m	2		0.5mm	0.35Ω/m	~30kg	12000m	4 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.

Mixal – Aluminium wire



- Increased magnesium level
- Especially for permanent fences
- High conductivity, for long fences without any loss of voltage
- Additional protection against corrosion
- Fast and easy to set up



Mixal, 400m, 1.8mm ø

Part no.	EAN	Piece
14882	4 014803 148827	1

Mixal, 250m, 2.5mm ø

Part no.	EAN	Piece
19853	4 014803 198532	1



High tensile wire GALVADUR

- Special wire with a thick galvanized zinc/alu 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 159456	1

GALVADUR 1.6, 315m (= 5kg), 1.6mm ø

Part no.	EAN	Piece
15904	4 014803 159045	1

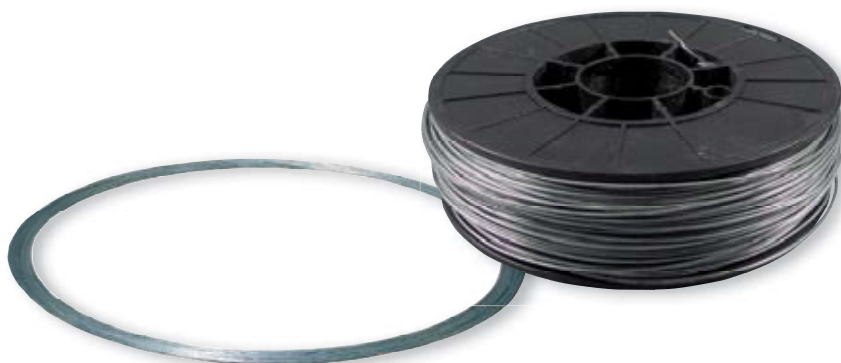


Part no.	Spool	Conduc-tors	HIGH TENSILE	Diameter stainless steel	Resistance		Max rec. fence length		
							main fences	main fences	
14882	250m	1		1.8mm	0.01Ω/m	~75kg	35 000m	12 000m	1
19853	400m	1		2.5mm	0.006Ω/m	~150kg	40v000m	18 000m	1
15945	625m	1		2.5mm	0.04Ω/m	~500kg	30 000m	11 000m	1
15904	315m	1		1.6mm	0.06Ω/m	~200kg	26 000m	8 700m	1

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

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	Diameter stainless steel	Resistance		Max rec. fence length		
						main fences / 12V*	dry battey fencers*	
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 (0.17Ω/m) than the standard quality (14.4Ω/m)!



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



UV stabilized polyethylene filaments for best resistance



TURBOMAX

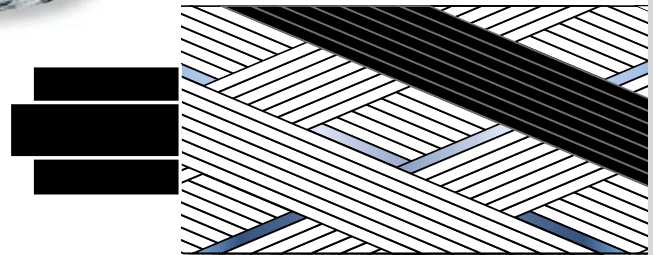
- The high number of **TLDmax** conductors in all TURBOMAX ropes ensure a high conductivity and high tensile strength
- The high number of **TLDmax** conductors ensure a high energy flow
- Polyethylene monofilaments with highest UV-protection
- Polyethylene monofilaments for highest tensile strength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



Part no.	Product	ø	Spool	EAN	Piece
17180	TURBOMAX R6-PE	6mm	200m	4 014 803 171801	1
17180-400	TURBOMAX R6-PE	6mm	400m	4 014 803 431398	1
17180-800	TURBOMAX R6-PE	6mm	800m	4 014 803 438003	1
17181	TURBOMAX R7-PE	7mm	200m	4 014 803 171818	1
17181-400	TURBOMAX R7-PE	7mm	400m	4 014 803 438287	1



Part no.	Spool	Conduc-tors	Resistance	Max rec. fence length	Main fencers	dry battery fencers*	Icon	
								Weight
17180	200m	6	0.25mm	0.17Ω/m	~500kg	16000m	5300m	8
17180-400	400m	6	0.25mm	0.17Ω/m	~500kg	16000m	5300m	3
17180-800	800m	6	0.25mm	0.17Ω/m	~500kg	16000m	5300m	1
17181	200m	6	0.25mm	0.17Ω/m	~600kg	16000m	5300m	8
17181-400	400m	6	0.25mm	0.17Ω/m	~600kg	16000m	5300m	3



Braided Rope TURBOMAX

- The high number of mixed conductors (copper and stainless steel) ensure a strong conductivity
- Excellent conductivity is achieved by a high number of conductors
- Polyethylene monofilaments for highest tensile strength
- 5 years warranty for UV-stability
- Colour: white with black identification strand

Part no.	Product	Ø	Spool	EAN	Piece
14512	Braided Rope D3	3mm	200m	4014803145123	1
14512-400	Braided Rope D3	3mm	400m	4014803452948	1
14513	Braided Rope D5,5	5.5mm	200m	4014803145130	1
14513-400	Braided Rope D5,5	5.5mm	400m	4014803452955	1



Part no.	Spool	Conduc-tors	Nirosa	copper	Resistance	Weight	Max rec. fence length	
							main fences	dry battery fences*
14512	200m	9	6 x 0.15mm	3 x 0.25mm	0.13Ω/m	~200kg	18000m	5900m
14512-400	400m	9	6 x 0.15mm	3 x 0.25mm	0.13Ω/m	~200kg	18000m	5900m
14513	200m	9	6 x 0.2mm	3 x 0.3mm	0.09Ω/m	~600kg	23500m	8000m
14513-400	400m	9	6 x 0.2mm	3 x 0.3mm	0.09Ω/m	~600kg	23500m	8000m

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

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



Part no.	Product	ø	Spool	EAN	Piece
17182	RANGER R6	5–6mm	200m	4 014 803 171825	1
17182-400	RANGER R6	5–6mm	400m	4 014 803 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



Part no.	Product	Conductors	Colour	ø	Spool	EAN	Piece
17184	RANGER FLUO R6	6	fluorescent	6mm	200m	4 014 803 171849	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	14000m	4600m	8
17182-400	400m	6	–	–	0.22mm	0.22Ω/m	~350kg	14000m	4600m	3
14184	200m	6	–	–	0.22mm	0.22Ω/m	~350kg	14000m	4600m	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.

RANGER STRETCH W8

- Elastic rope with conductors
- 3 conductors
- Resistance: 8.1/m
- 0.2mm stainless steel – breaking strength 100kg
- Ideal for gate handle set with rope
- Length: 50m



Part no.	Product	Conductors	Colour	∅	Spool	EAN	Piece
462560	RANGER STRETCH W8	1	white/black/white	8mm	50m	3 485630 025604	1

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



Part no.	Product	Conductors	Colour	∅	Spool	EAN	Piece
17183	GREEN-POWER R6	6	white	5–6mm	200m	4 014803 171832	1
17183-400	GREEN-POWER R6	6	white	5–6mm	400m	4 014803 438027	1



FARMER

- For short fences only
- Colour: white



Part no.	Product	Conductors	Colour	∅	Spool	EAN	Piece
153372	FARMER R6 200	6	white	6mm	200m	4 014803 438034	1
153372-400	FARMER R6 400	6	white	6mm	400m	4 014803 438041	1

Part no.	Spool	Conductors	Diameter stainless steel	TLDmax TECHNOLOGY	Resistance	Max rec. fence length	Max rec. fence length		Icon
							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



Guardian Equestrian

– Combining comfort with safety

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 the shock from the fence



Outdoor rug „Genius“

- Turnout rugs that work with electric fencing
- Unpadded 0g
- 1 200 Denier
- Waterproof 3 000mm, PU-coated

- Cross surcingle, fillet string, quick snap & adjustable chest closure
- Liner rugs can be used as first layer, without restricting the function
- Washable at 30°C with special washing agent for outdoor rugs, do not tumble dry

Part no.	Total length	Back length	EAN	Piece
47RUG00G-43	4FT3IN / 130cm	85cm	0215854039421	1
47RUG00G-46	4FT6IN / 140cm	90cm	0215854039438	1
47RUG00G-49	4FT9IN / 149cm	95cm	0215854039445	1
47RUG00G-5	5FT / 153cm	100cm	0215854039452	1
47RUG00G-53	5FT3IN / 162cm	110cm	0215854039469	1
47RUG00G-56	5FT6IN / 170cm	115cm	0215854039476	1
47RUG00G-59	5FT9IN / 176cm	125cm	0215854039483	1
47RUG00G-6	6FT / 185cm	130cm	0215854039490	1
47RUG00G-63	6FT3IN / 191cm	140cm	0215854039506	1
47RUG00G-66	6FT6IN / 198cm	145cm	0215854039513	1
47RUG00G-69	6FT9IN / 206cm	155cm	0215854039520	1
47RUG00G-7	7FT / 215cm	160cm	0215854039537	1



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



Outdoordecke Fence Buster™ and removable neck cover

Part no.	Total length	Back length	EAN	Piece
47RUG250BN-5	5FT / 153cm	100cm	5 021385 008903	1
47RUG250BN-53	5FT3IN / 162cm	110cm	5 021385 008912	1
47RUG250BN-56	5FT6IN / 170cm	115cm	5 021385 008929	1
47RUG250BN-59	5FT9IN / 176cm	125cm	5 021385 008935	1
47RUG250BN-6	6FT / 185cm	130cm	5 021385 008943	1
47RUG250BN-63	6FT3IN / 191cm	140cm	5 021385 008950	1
47RUG250BN-66	6FT6IN / 198cm	145cm	5 021385 008967	1
47RUG250BN-69	6FT9IN / 206cm	155cm	5 021385 008974	1
47RUG250BN-7	7FT / 215cm	160cm	5 021385 008981	1

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



Outdoordecke Fence Buster™ and removable neck cover and liner

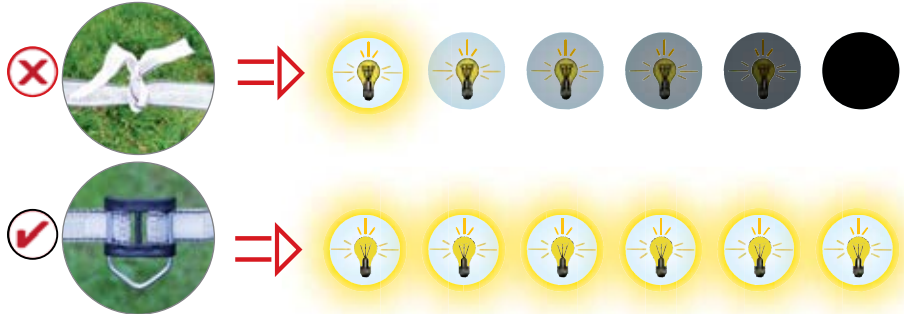
Part no.	Total length	Back length	EAN	Piece
47RUG250BNL-59	5FT9IN / 176cm	125cm	5 021385 008995	1
47RUG250BNL-6	6FT / 185cm	130cm	5 021385 009001	1
47RUG250BNL-63	6FT3IN / 191cm	140cm	5 021385 009015	1
47RUG250BNL-66	6FT6IN / 198cm	145cm	5 021385 009025	1
47RUG250BNL-69	6FT9IN / 206cm	155cm	5 021385 009032	1

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



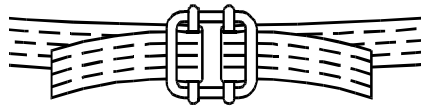
Never knot your tape!

- 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

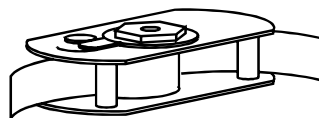
- Joins tapes up to 40mm simply and reliably
- Simple restraining possible



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
14555C	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

Tape connector 20mm

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

Part no. **14988C** EAN **4 014803 149886** Piece **10**



Tape connection for gate handles

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

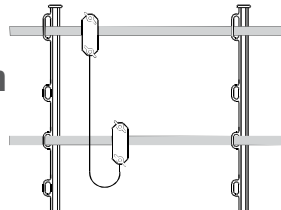
Part no. **14989C** EAN **4 014803 149893** Piece **2**



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 **4 014803 405582** Piece **1**



Wire connector

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

galvanized

Part no. **15063C** EAN **4 014803 405388** Piece **10**

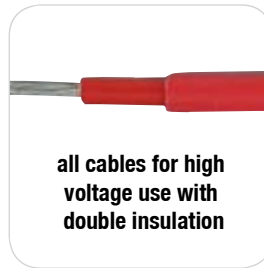
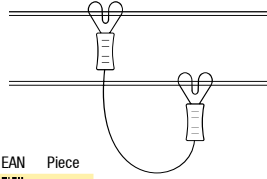
stainless steel

Part no. **14045C** EAN **4 014803 140456** Piece **10**



Wire connection cable with 2 heart clips

- Cable length 50cm
- For vertical connections of wires



Part no. **10440C** EAN **4014803405555** Piece **2**

Wire joining clamp

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



Part no. **15526C** EAN **4014803405791** Piece **10**

Wire connection screw

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



Part no. **14197C** EAN **4014803411972** Piece **10**

Wire connection screw with plastic coating

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



Part no. **14356** EAN **4014803413563** Piece **10**

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

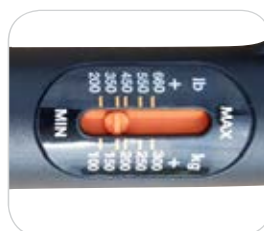
Part no. **15960** EAN **4014803415960** Piece **10**

For wire 1 – 2mm

Part no. **15967** EAN **9038006012036** Piece **20**

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 **9038006012548** Piece **1**



Wire and rope strainer



Wire and rope strainer

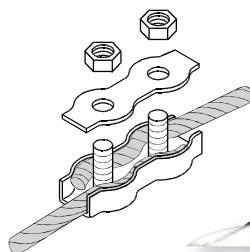
- Suitable for wires and ropes up to 6mm diameter and tapes up to 13mm diameter
- Easy to apply
- Easy straining is possible at any time
- The wire or the rope does not have to be cut



Part no.	EAN	Piece
14991	4 014803 149916	2

Rope connector

- For a secure and durable connection of electrified 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. (5–6mm \varnothing)
- Ensures excellent conductivity across the joint
- To connect ropes on gate handle
- To connect the rope on start and ends insulators



7–8mm \varnothing , stainless steel

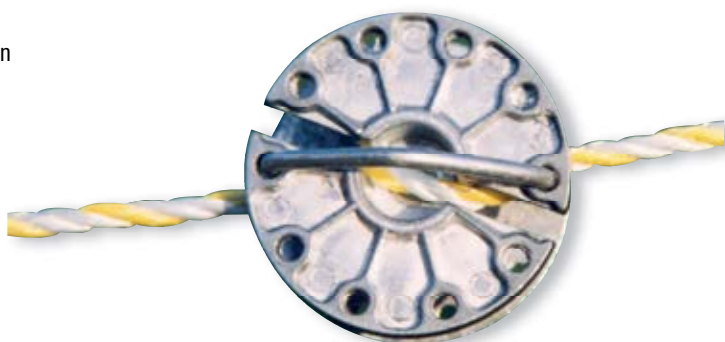
Part no.	EAN	Piece
14054C	4 014803 140543	5

5–6mm \varnothing , galvanized

Part no.	EAN	Piece
15314C	4 014803 405913	5

Rope strainer 8mm \varnothing

- Suitable for all types of steel wire and electrified rope up to 8mm \varnothing in permanent or temporary fences
 - Complete with arrester lock
 - Allows insertion of wire and rope without cutting the ends
- Attention most suitable for: 1.0 – 2.8mm \varnothing**



Part no.	EAN	Piece
15937C	4 014803 405483	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 \varnothing
- Length of the cable: 50cm



7–8mm \varnothing , stainless steel

Part no.	EAN	Piece
10597C	4 014803 105974	1

5–6mm \varnothing , galvanized

Part no.	EAN	Piece
10596C	4 014803 105967	1




Insulators

HIGHLIGHT
★★★★★ 

Unique
Insulator with perfect isolation!
> p.115

Insulators hold the conductive material in place around the enclosure. High isolation capacity is necessary to avoid an unintentional loss of energy. You can find the correct insulators for your fence on the following pages.

HIGHLIGHT
★★★★★ 



Fixing
Suitable for tapes, twines and ropes. The conductor material is fixed.
> see.p 112

HIGHLIGHT
★★★★★ 



Helpful device
To screw in the insulators with a cordless drill.
> see p. 117

HIGHLIGHT
★★★★★ 



Distance
Keep conductor material at a distance.
> see p. 120

Chapter	Page
Insulators I product guide I overview	108 – 109
Insulators I for tapes	110 – 113
Insulators I for twines	114 – 117
Insulators I screw in aid	117
Insulators I for wires	118
Insulators I for ropes	119
Insulators I distance insulators I corner insulators	120 – 122
Insulators I supplementary insulators	123 – 126



Type of insulator	description	Suitable for				Suitable as		Fixing		Fence material is		Support		UV UV-stability	Page
		tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short		
Insulator for tapes	TURBOMAX I-40 PLUS 15843	40	8	4		•	•		5	•				•	110
	COMBI IS-40 15682	40	8	4		•	•	6			•		•	•	112
	EQUIBLOCK 14161	40		4		•			5	•				•	111
	RANGER I-40 FIX 15373	40				•			5	•				•	111
	RANGER IS-40 FIX 15388	40				•		6		•			•	•	111
	RANGER I-40 15460	40				•			5		•			•	112
	RANGER I-40FIX PLUS 14990	40	8			•			5	•				•	112
	CORNER I-40 15571	40	8	4		•			5		•			•	113
	CORNER I-40 PLUS 15572	40					•		5	•				•	113
	RANGER IS-20 15555	20		4		•		5			•			•	111
Insulator for twines	RANGER IS-L 15370	13		4		•	•	6			•	•		•	114
	RANGER IS-S 15461	13		4		•	•	6			•		•	•	114
	GIGANT IS-S 140271	13		4		•	•	6			•		•	•	115
	RANGER IS-W PC 15485			3		•	•	6		•	•	•		•	116
	FARMER IS-L 15364	13		4		•	•	5.3			•		•	•	115
	FARMER PND 14984	13		4		•		8			•			•	115
	FARMER IS-S 15275	13		4		•		5.3			•		•	•	116
	FARMER IS-W 15275			3		•		5.3		•	•	•		•	116
	TRAPPER IS-S 14176	13		4		•		5.3			•		•	•	116
	Nailway insulator 153021			2		•			Nail		•			•	116
	Bobbin insulator 15495			2		•			Nail		•			•	117
	Staple insulator 15457			2		•			Staple		•			•	117
Insulator for wires	HOT STOP I-20 15929	20	8		2.5	•	•		5		•			•	118
	Pin-Lock 14933			4	2.5	•	•		5		•			•	118
	Permanent fence insulator economy 14164		6		2.5	•	•		5		•			•	118
	Wire insulator economy 14165		6	4	2.5	•	•		5		•			•	118
Insulator for ropes	TURBOMAX IS-8 15835	13	8	4		•	•	6			•		•	•	119
	Insulator for rope standard 14198	13	8	4		•		6			•		•	•	119
	Insulator for rope 14408	13	8	4		•		5			•		•	•	119

Type of insulator	description	Suitable for				Suitable as		Fixing		Fence material is		Support		UV	Page
		tape (mm)	rope (mm)	twine (mm)	wire (mm)	distance	end or corner insulator	support ø (mm)	screws (mm)	fixed	free moving	long	short	UV-stability	
Distance Insulator	COMBI ISD-40 14938	40	8	4		•		6			•		•	120	
	TURBOMAX ISD-8 15838	13	8	4		•		6			•		•	120	
	TURBOMAX ISD-8 metric 15073	13	8	4		•		M6			•		•	120	
	RANGER ISD-20 15186	12		4		•		6			•		•	120	
	RANGER ISD 15595	20		4		•		6			•		•	121	
	FARMER ISD 14937	13		4		•		6			•		•	121	
Corner Insulator	Corner insulator 15830	40					•				•		•	122	
	CORNER IS-W 10012		8	4			•	7			•		•	121	
	CORNER I-W 15183			4			•		5		•		•	122	
Distance Insulator	Porzellan 15925				2.5	•	•			•	•			122	
	ABS 14061				2.5	•	•			•	•		•	122	
	PP 15070				2.5	•	•			•	•		•	122	
	Porcelain 15194				2.5	•	•			•	•		•	122	
Supplementary insulators	Ring insulator 15293			4		•					•		•	124	
	clip insulator for fiberglass posts 14046	13		4		•					•		•	124	
	IP-15 15129		8	4		•					•		•	125	
	COMBI IP-15 15290	13	6	4		•					•		•	125	
	IP19 15474	20		4		•					•		•	125	
	Plastic loop 15480	20	8	4		•					•		•	126	
	Spare insulator 15059			4		•					•		•	123	
	Spare insulator 15053			4		•					•		•	123	
	Metall clip 150511			4		•					•		•	123	
	Spare insulator 15415	20		4		•					•		•	123	
	Splint insulator 15805			4		•					•		•	124	
	Insulator for tape 14969	40		4		•					•		•	125	
	CLIP MASTER 14903			4	2.5										126
	Head insulator 14922			4	2.5	•					•			•	126

Legend:

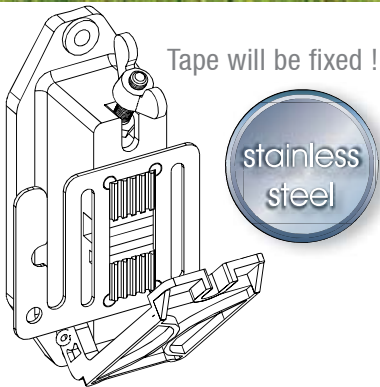
40	•
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Ideally suited

40

Limited suitability





Tape will be fixed !

stainless steel

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 to extreme tractive forces



TURBOMAX I-40 and TURBOMAX I-40 PLUS

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

Our tape insulator has many premium features
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 handling – one hand strains the tape, the other one fastens the screw

The EQUIBLOCK insulator keeps the tape strained and secure. 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	4014803141613	8
14161EI	4014803428929	30



Tape will be fixed!



With rubber strip!

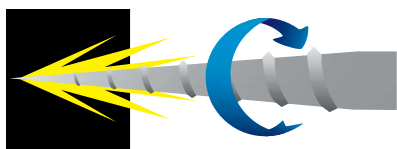
Tape insulator EQUIBLOCK Plus

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

Part no.	EAN	Piece
14162C	4014803141620	8



Tape will be fixed!



horizont threaded insulator backing 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	4014803408402	12



Tape will be fixed!

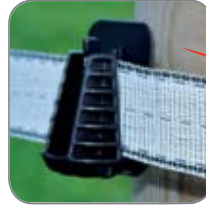


RANGER IS-40 FIX

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

With screw in support

Part no.	EAN	Piece
15388C	4014803408419	15



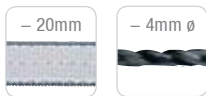
Tape will be fixed!



RANGER IS-20

- Thread for wood
- For tapes up to 20mm
- For ropes up to 4mm ø

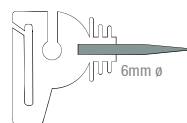
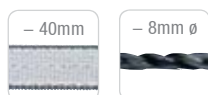
Part no.	EAN	Piece
15555-25	4014803408365	25
15555C	4014803408314	25
15555EI	4014803002945	100



COMBI IS-40

- Short support
- Large drying surface
- Thread for wood
- For tapes up to 40mm
- For twines and ropes up to 8mm \varnothing

Part no.	EAN	Piece
15682		30
15390C		25
15390EI		80
15390EI-150		150



For tapes up to 40mm

For ropes up to 8mm

Easy to screw in



Allows free movement!



COMBI IS-40 happy

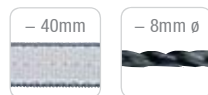
Part no.	Colour	EAN	Piece
15390HG-30	lime		30
15390LI-30	purple		30
15390TU-30	turquoise		30



RANGER I-40

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

Part no.	EAN	Piece
15460-10		10
15460C		20



Allows free movement!



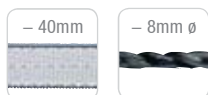
HIGHLIGHT
★★★★★



RANGER I-40 FIX PLUS

- For screwing in or nailing on
- Can also be fixed with cable ties
- For tapes up to 40mm
- For wires and ropes up to 8mm \varnothing

Part no.	EAN	Piece
14990		25
14990C		20
14990EI		120



Tape will be fixed!



CORNER I-40

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



Allows free movement!



INOX, with bolt, stainless steel

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

with bolt, galvanized

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

CORNER I-40 PLUS

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



Tape will be fixed!



INOX, with bolt and buckle, stainless steel

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

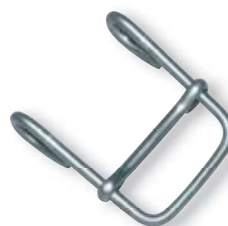
with bolt and buckle, galvanized

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

Spare buckle for corner insulator

- To connect further tapes
- Refined steel

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



Tape insulator CORNER I-40 PLUS with tape strainer

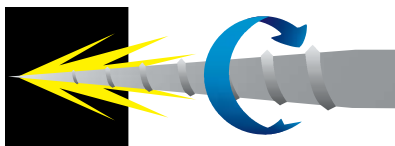
- For tapes up to 40mm
- Easy and secure straining
- With protection against twisting
- Smooth setup change in existing fence system
- Screw in and nail on possible



Tape will be fixed!



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

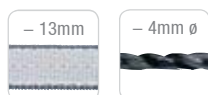


horizont threaded insulator backing for wood

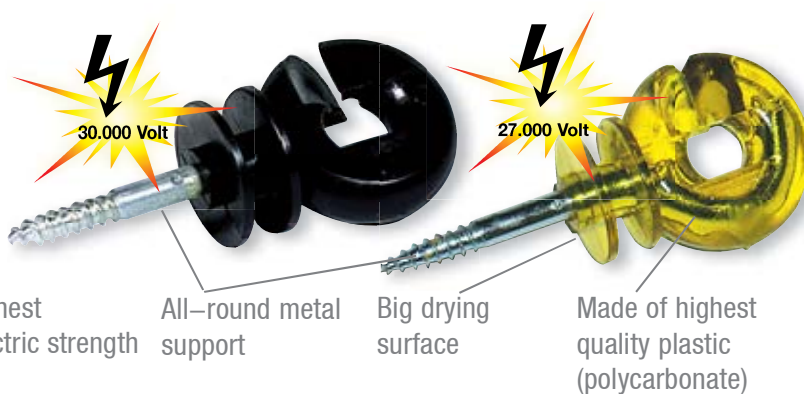
- Long and taper thread for easy installation
- Self-tapping thread for easy screwing in.
- Primary drilling and primary counterbore is not required
- Sharp thread edges for a secure fit
- Insulator backing is produced with specially coated steel

RANGER IS-L

- With short support
- Big drying surface
- Wooden thread

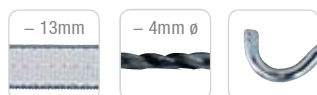


Part no.	EAN	Piece
15370	4 014803 163708	25
15370C	4 014803 421616	25
15370-50	4 014803 405340	50
15370EI	4 014803 002792	120
15370EI-240	4 014803 428554	240

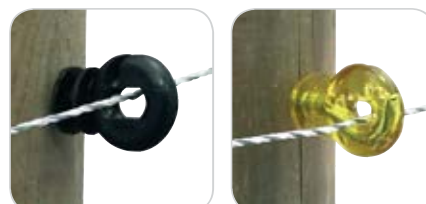
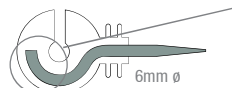


RANGER IS-L PC

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



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



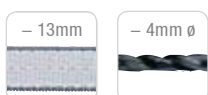
RANGER IS-L happy

Part no.	Color	EAN	Piece
15370HG	lime	4 014803 444639	25
15370LI	purple	4 014803 441678	25
15370TU	turquoise	4 014803 441652	25

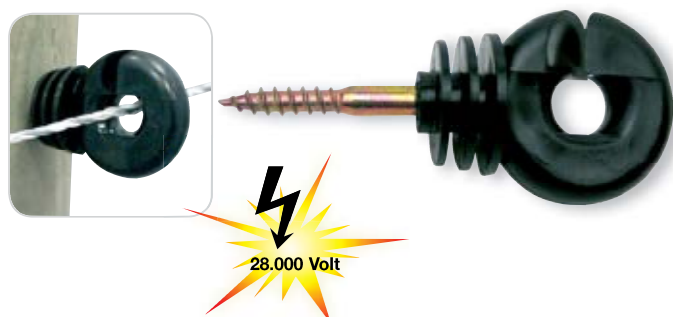
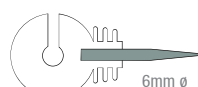


RANGER IS-S

- 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. **15364** EAN **4 014803 15364 7** Piece **50**



GIGANT IS-S

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

Part no. **140271** EAN **4 014803 43235 3** Piece **25**



HIGHLIGHT ★★★★★

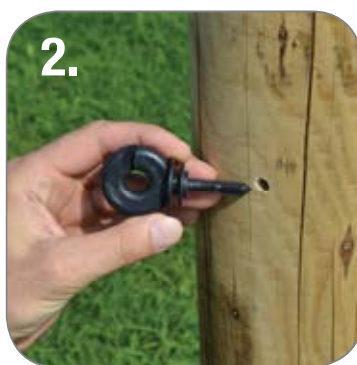
Isolator FARMER PND

- 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 14984 8** Piece **50**
14984EI EAN **4 014803 44637 4** Piece **150** *

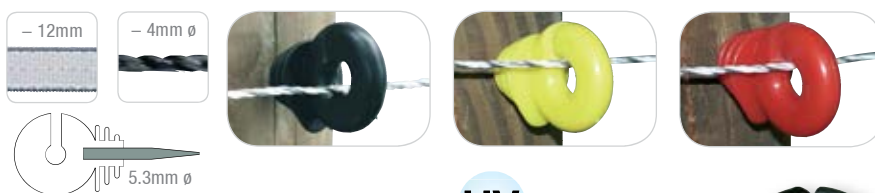


*The bucket contains a universal 8mm HSS-drill attachment free of charge

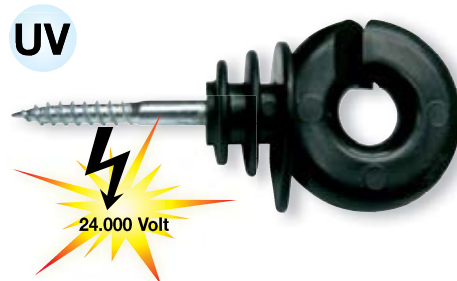


FARMER IS-S

- With short support
- Big drying surface
- Wooden thread



Part no.	Product	EAN	Piece
15275C	black	4 014 803 4 206 95	25
15275	black	4 014 803 4 152 756	50
15275-25	black	4 014 803 4 209 23	25
15275EI	black	4 014 803 4 198 59	120
15275GE	yellow	4 014 803 4 176 02	50
15275GE-25	yellow	4 014 803 4 209 16	25
15275RT	red	4 014 803 4 215 86	50



Farmer-Box

Contains:

- 97 insulators 15275
- 2 gate handles 15817SW
- 1 screw-in tool 15357

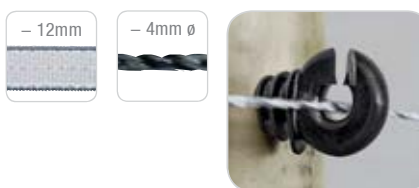
Part no.	EAN	Piece
14957EI	4 014 803 4 434 41	100



TRAPPER IS-S

- Backing and wooden thread

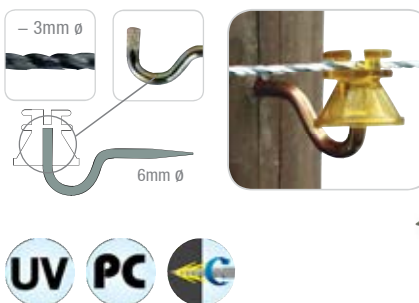
Part no.	EAN	Piece
14493-50	4 014 803 4 449 35	50



RANGER IS-W PC

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

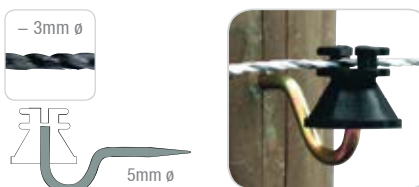
Part no.	EAN	Piece
15485	4 014 803 4 216 47	25
15485C	4 014 803 4 154 859	25



Farmer IS-W

- For wires up to 2mm
- Wooden thread

Part no.	Product	EAN	Piece
15278	black	4 014 803 4 152 787	50
15278-25	black	4 014 803 4 209 47	25
15276	yellow	4 014 803 4 152 763	50
15276-25	yellow	4 014 803 4 209 30	25



Nailway insulator

with nail

Part no.	EAN	Piece
15302	4 014 803 4 058 38	50



Hint!

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



Bobbin insulator

with nail

Part no.	EAN	Piece
15495-100	4 014803 405968	100

with nail

Part no.	EAN	Piece
15495C	4 014803 420404	25



Hint!

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



Staple insulator

with nail

Part no.	EAN	Piece
15457	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
14965	4 014803 149657	1
14965C	4 014803 444585	1



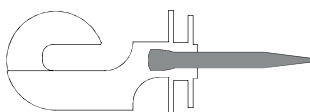
HIGHLIGHT
★★★★★



Screw in aid for wire and rope insulators

- For use with drill bits
- Suitable for all Turbomax twine and rope insulators (see p. 119)

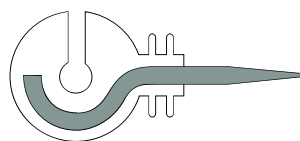
Part no.	EAN	Piece
15349C	4 014803 431721	1



Screw in aid for ring insulators

- For use with drill bits
- Suitable for all ring insulators up to 16mm thickness (horizont types see p. 114 – 116)

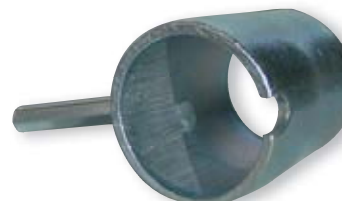
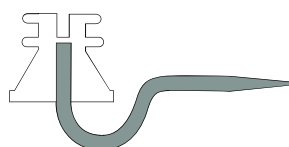
Part no.	EAN	Piece
15357C	4 014803 431738	1



Screw in aid for slit insulators

- For use with drill bits
- Suitable for all slit insulators from horizont (see p. 116)

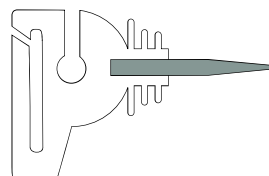
Part no.	EAN	Piece
15358C	4 014803 431714	1



Screw in aid for COMBI IS-40

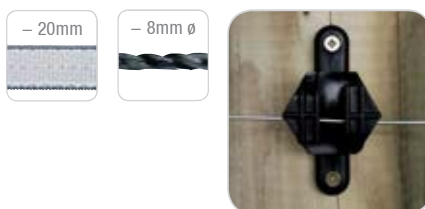
- For use with drill bits
- Suitable for all COMBI insulators from horizont (see p. 112)

Part no.	EAN	Piece
14088C	4 014803 431745	1



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 \varnothing
- Insulator can be screwed-in or nailed on
- The most powerful of its class



Part no.	EAN	Piece
15929-10		10
15929C		20
15929EI		45



Hint!

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

Permanent fence insulator Economy

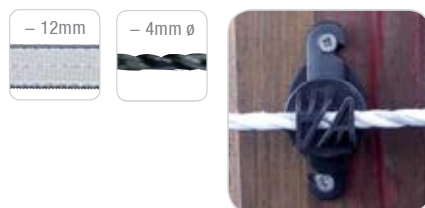
- For wires and ropes up to 8mm
- For fence tape up to 12mm
- To be nailed or screwed onto posts



Part no.	EAN	Piece
14164		25

Wire insulator Economy

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



Part no.	EAN	Piece
14165		50

Pin-Lock

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



Part no.	EAN	Piece
14933-50		50

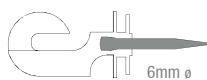


These insulators are unique twine and rope insulators. They lie well in the hand and thus allows mounting without additional tools. The special feature is the construction of the insulator head. The fence material is inserted easily from above, so the fence material will not fall out. We offer this top product as a special insulator for electrical rope up to 8mm.



TURBOMAX IS-8

- Special insulator for ropes 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 **4014803406425** Piece **1**



Insulator for rope standard

- Insulator for ropes up to 8mm
- Short support
- With wooden thread



Part no. **14198** EAN **4014803141989** Piece **25**

Insulator for rope

- Insulator with wooden thread for ropes up to 8mm and tapes up to 12mm

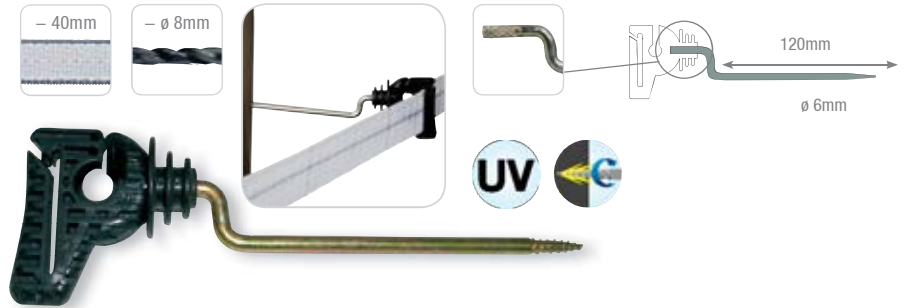


Part no. **14408** EAN **4014803144089** Piece **10**

COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm ϕ
- Wooden thread
- Big drying surface

Part no. **15828C** EAN **4014803158284** Piece **10**

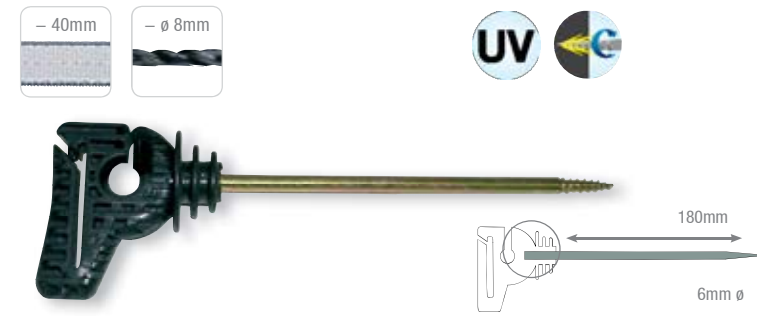


HIGHLIGHT ★★★★★

COMBI ISD-40

- For tapes up to 40mm
- For twines and ropes up to 8mm ϕ
- Wooden thread
- Big drying surface

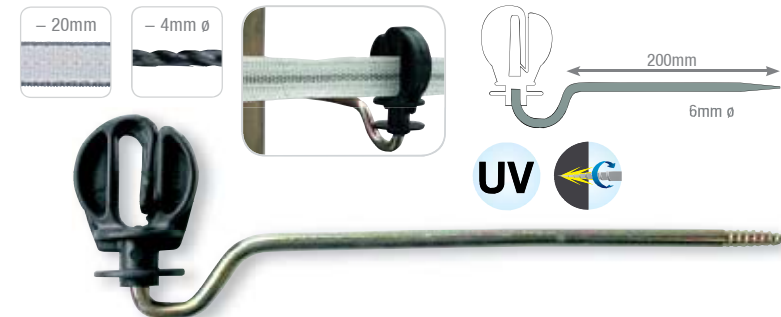
Part no. **14938-10** EAN **4014803149381** Piece **10**
14938C EAN **4014803441904** Piece **10**



RANGER ISD-20

- Ideal for fixation of tapes up to 20mm
- Tape cannot slip out
- Also suitable for twines
- Wooden thread

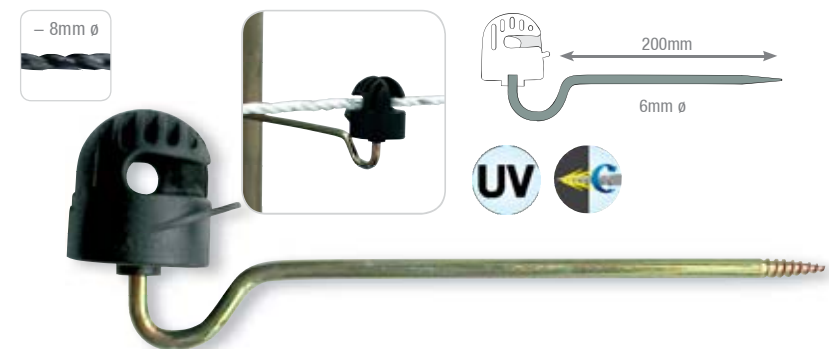
Part no. **15186** EAN **4014803151865** Piece **10**



TURBOMAX ISD-8

- For ropes up to 8mm ϕ
- Wooden thread
- Big drying surface

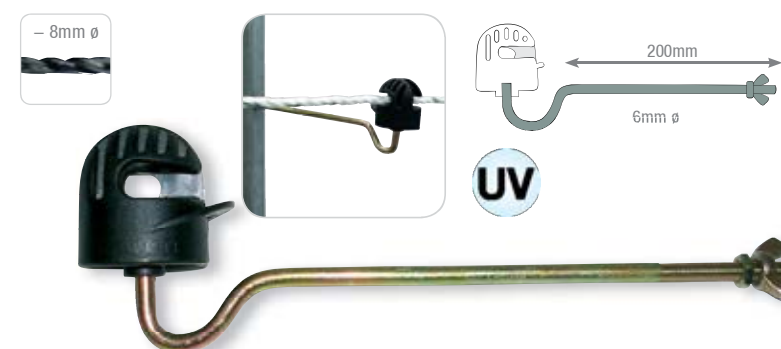
Part no. **15838C** EAN **4014803405456** Piece **8**



TURBOMAX ISD-8 metric

- For ropes up to 8mm ϕ
- Wooden thread
- With metric thread M6
- Big drying surface

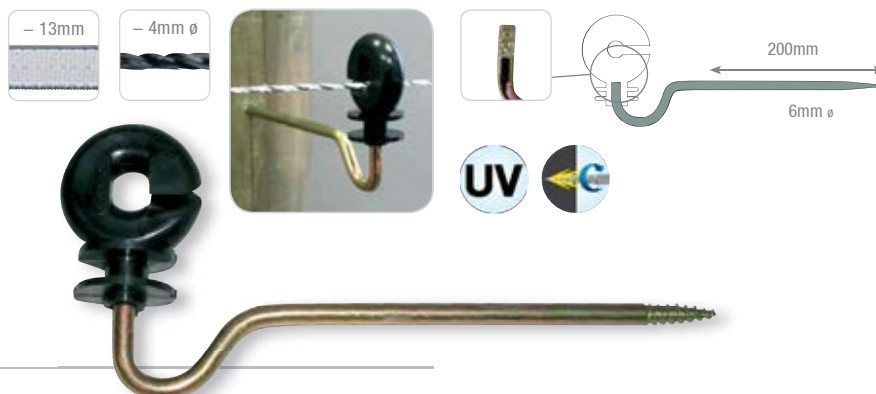
Part no. **15073C** EAN **4014803405395** Piece **8**



RANGER ISD

- Large wire support
- Wooden thread
- High insulation

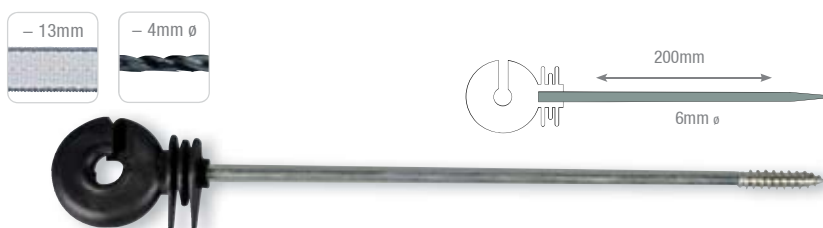
Part no. **15595** EAN **4014803155955** Piece **10**



FARMER ISD

- Large wire support
- Wooden thread

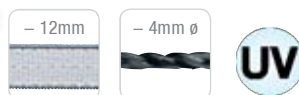
Part no. **14937** EAN **4014803149374** Piece **10**



Flexibar 400, one-sided

Distance from post 40cm

Part no. **15318** EAN **4014803153180** Piece **10**



- Made from extruded plastic material therefore extremely long life
- Suitable for all wires, ropes and tapes
- Delivered with 20 staples



Flexibar 600, two-sided

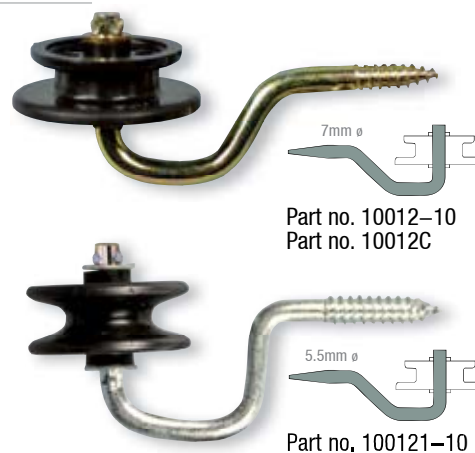
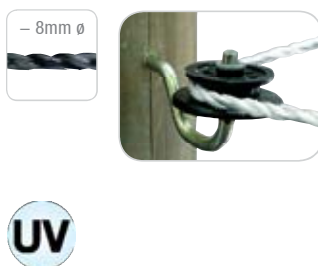
Distance from post each way 30cm

Part no. **15319** EAN **4014803153197** Piece **10**

CORNER IS-W

- Wooden thread

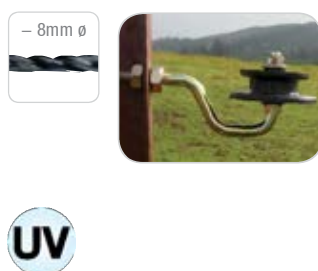
Part no. **10012-10** EAN **4014803422446** Piece **10**
10012C EAN **4014803405371** Piece **5**
100121-10 EAN **4014803440679** Piece **10**



Corner insulators „CORNER IS-W“

- With metric thread M8
- Thread length 30mm

Part no. **14166C** EAN **4014803141668** Piece **5**



Corner insulator

- Big corner insulator for tapes up to 40mm
- Wooden thread



Part no. **15830** EAN **4 014803 158307** Piece **4**



CORNER I-W

without nail

Part no. **15183-10** EAN **4 014803 406286** Piece **10**



CORNER I-W

with nail

Part no. **14089C** EAN **4 014803 140890** Piece **50**

Heavy duty corner knob made from porcelain

- For permanent fence wire GALVADUR

Part no. **15925** EAN **4 014803 159250** Piece **10**



Heavy duty corner knob ABS

- For ropes up to 8mm ϕ
- For permanent fence wire GALVADUR

Part no. **14061C** EAN **4 014803 140616** Piece **12**



Heavy duty corner knob

- For ropes up to 8mm ϕ
- For permanent fence wire GALVADUR

Part no. **15070** EAN **4 014803 150707** Piece **10**

Part no. **15070C** EAN **4 014803 419545** Piece **12**



Heavy duty corner insulator

Part no. **15194-10** EAN **4 014803 420848** Piece **10**



Spare insulator

- Spare insulator for oval posts and round posts (see p. 144)



with plastic ring for round post

Part no. EAN Piece
15059-50  

with plastic ring for oval post

Part no. EAN Piece
15053-50  

with metal ring for round post

Part no. EAN Piece
15060-50  

with metal ring for oval post

Part no. EAN Piece
15054-50  



Spare insulator with metal clip

- For all 8mm round- or metal posts (see p. 144)

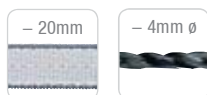


Part no. EAN Einheit
150511  



Spare insulator plastic

- For all 8mm round- or metal posts (see p. 144)



Part no. EAN Piece
15415  



Splint insulator with metal splint

- For angle steel posts with 2mm and 3mm (see p. 144)

Part no.	EAN	Piece
15805	 4014803158055	 50



Ring insulator with metric thread

- For angle steel posts with 2mm and 3mm (see p. 144)
- With metric thread M6
- Thread length 30mm

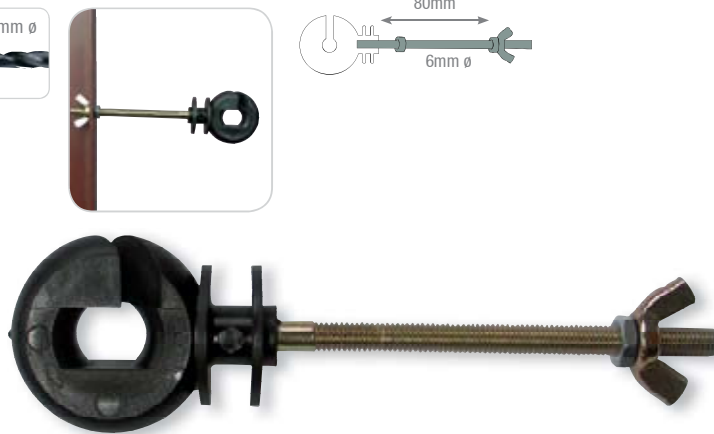
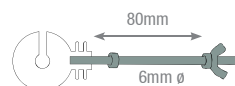
Part no.	EAN	Piece
15293	 4014803152930	 25
152931	 4014803432346	 25



Ring insulator with metric thread

- Metal/thread length 80mm
- With metric thread M6
- For twines and tapes up to 12mm

Part no.	EAN	Piece
14167	 4014803141675	 25



Add on and clip insulator for Fibre glass posts

- Suitable on 10mm posts (see p. 141)
- For twines and tapes up to 12mm

Part no.	EAN	Piece
14046-25	 4014803420701	 25
14046C	 4014803140463	 25
14046EI	 4014803420503	 60



IP-15

- For posts up to 15mm \varnothing
- For twines and ropes up to 8mm
- Open at rear for direct post installation

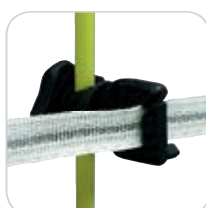
Part no.	EAN	Piece
15129	4 014803 151292	10
15129C	4 014803 420473	25
15129EI	4 014803 420541	60



COMBI IP-15

- For posts up to 15mm \varnothing
- For tapes up to 12mm
- For twines and ropes 6mm \varnothing
- Open at rear for direct post installation

Part no.	EAN	Piece
15290	4 014803 152909	25
15290C	4 014803 417923	25
15290EI	4 014803 417930	60



Tape insulator to screw

- For round posts up to 12mm \varnothing
- For tapes up to 40mm (not for EQUISTOP tape)
- For wires and ropes up to 6mm \varnothing
- Locking tab to secure tape in place

Part no.	EAN	Piece
14969-25	4 014803 444592	25



IP-19

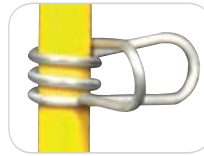
- For posts up to 7-19mm \varnothing (see p. 142)
- For tapes up to 12mm
- For ropes up to 6mm \varnothing
- Open at rear for direct post installation

Part no.	EAN	Piece
15474C	4 014803 405739	10



Insulator CLIP MASTER Inox

- For posts 14885, 14887, 14888, 14886 (see p. 141)
- For permanent fencing
- For twines

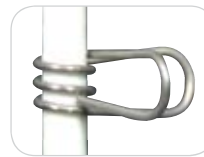


For round posts 12mm ø

Part no.	EAN	Piece
14903C		25
14903-100		100

For round posts 10mm ø

Part no.	EAN	Piece
14904C		25
14904-100		100



Head insulator

- For fibreglass posts 12mm ø
- For wires up to 2mm ø



For fibreglass posts 12mm ø

Part no.	EAN	Piece
14922		50



Plastic loop

- Suitable for posts 10090, 15376, 15377 (see p. 142)
- For tapes up to 20mm
- For ropes up to 8mm ø



For posts 19mm ø

Part no.	EAN	Piece
15480		25



Plastic loop

- Suitable for posts 10090, 15376 und 15377 (see p. 142)
- For tapes up to 40mm
- For ropes up to 8mm ø



Part no.	EAN	Piece
15481		10



Plastic loop

- Suitable for posts 14886 (see p.141)
- For twines and ropes
- For tapes up to 12mm



Plastic loop

- Suitable for posts 14886 (see p.141)
- For twines and ropes
- For tapes up to 12mm

For posts 12mm ø

Part no.	EAN	Piece
17801F		50



For posts 10mm ø

Part no.	EAN	Piece
17804F		50



HIGHLIGHT



SMART post

Plastic post with robust new construction

> p. 138–139

Gates, Reels & Posts

Gate solutions allow safe and easy access through the fence line. Solid and steady posts provide a perfect fitting for the conductive material. We have many practical products that enable you to erect a quick and effective electric fence.

HIGHLIGHT



Pulls!

The compression spring holds up high forces permanently.
> page 129

HIGHLIGHT



Constand stand

Durable plastic posts.
> page 138–139

HIGHLIGHT



High energy

Exchangeable plastic reel with high capacity. Maxi Roller 4000
> page 135

Chapter

Page

Gates, Reels & Posts I
Gate handles and sets

128 – 134

Gates, Reels & Posts I
Reels

135 – 137

Gates, Reels & Posts I
Posts

138 – 144

TURBOMAX

TURBOMAX G, with hook, black

Part no.	EAN	Piece
15139E	4 014803 402486	1

TURBOMAX GL, with loop, black

Part no.	EAN	Piece
10013E	4 014803 402479	1

TURBOMAX G-PC, with hook, yellow

Part no.	EAN	Piece
15445E	4 014803 402509	1

TURBOMAX GL-PC, with loop, yellow

Part no.	EAN	Piece
15436E	4 014803 402493	1

Made of high quality material

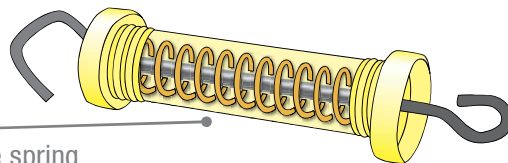
UV

Made of high quality polycarbonate for strengthened insulation at high voltage energisers

UV

PC

Extremely strong and durable spring



RANGER G

- Can be hooked into all gate handles and corner insulators
- With additional loop at the gate handle for fixing of fence material
- Colour: black
- Extra large flanges

RANGER G, with hook

Part no.	EAN	Piece
15295	4 014803 152954	1

UV



FARMER G

- Standard gate handle with simple tension spring
- With additional loop at the gate handle for fixing of fence material

Part no.		EAN	Piece
15817GE	FARMER G, with hook, yellow	4 014803 158178	1
15817SW	FARMER G, with hook, black	4 014803 417848	1
15817SW-5	FARMER G, with hook, black	4 014803 417855	5
15817OR	FARMER G, with hook, orange	4 014803 417879	1
15817OR-5	FARMER G, with hook, orange	4 014803 417886	5
15817HG	FARMER G, with hook, lime	4 014803 444660	1
15817LI	FARMER G, with hook, purple	4 014803 441638	1
15817TU	FARMER G, with hook, turquoise	4 014803 441614	1

UV



FARMER GL

- Standard gate handle with simple tension spring
- With additional loop at the gate handle for fixing of fence material

Part no.		EAN	Piece
14080SW	FARMER GL, with loop, black	4 014803 140807	1

UV



Gate handle made of stainless steel

- Hook and rotating compression spring made of stainless steel
- Reinforced insulation, therefore suitable for use with powerful fencers
- With spring movement limitation

Part no. EAN Piece

14350 4 014803 143501 1



TRAPPER G

- Standard gate handle with simple tension spring
- With additional loop at the gate handle for fixing of fence material
- With spring movement limitation

with hook

Part no. EAN Piece

14172SW 4 014803 141729 1



RANGER GT-40

- With the additional mounted tape connector you can fasten a tape up to 40mm directly at the gate handle
- For ideal gate opening
- Same construction as type 15295 (see p. 128)

with loop

Part no. EAN Piece

156031 4 014803 446541 1



RANGER GT-40

- With the additional mounted tape connector you can fasten a tape up to 40mm directly at the gate handle
- For ideal gate opening
- Same construction as type 15139E (see p. 128)

with hook, green

Part no. EAN Piece

151391GNV 4 014803 446558 1



TRAPPER GT

- Complete with fixed tape connector for tapes up to 40mm
- The tape can be connected directly to the gate handle and ensures optimal gate opening / connection
- With spring movement limitation

with hook

Part no. EAN Piece

14409 4 014803 144096 1



Gate handle insulator

- Screw-in type for wooden or recycled posts
- Suitable for gate handles both with hook and with loop
- Colour: black

Part no.	EAN	Piece
14092C	4014803140920	2
14175	4014803141750	10
15126C	4014803405616	5



Gate handle insulator prevent proof

- No movement of the loops whilst in the gate handle
- Screw-in type for wooden or recycled posts
- Suitable for gate handles both with hook and with loop
- Colour: black

Part no.	EAN	Piece
14866-10	4014803148667	10



Gate handle insulator with metric thread

- With metric 6mm thread
- Length of support / thread: 30mm
- For all gate handles with loop and look

Part no.	EAN	Piece
14169C	4014803141699	5



Gate handle insulator with thimble

- With screw-in support for wooden posts and recycled posts
- For all gate handles with loop and hook
- With thimble. The thimble provides secure connection of rope and protects the rope against damage

Part no.	EAN	Piece
14170C	4014803141705	2



HIGHLIGHT
★★★★★



Gate handle insulator

- Insulator with metal connection plate
- For use with all gate handles fitted with hook
- An additional wire joining clamp (part no. 15526C) (see p. 104) allows easy electrification of a multistrand fence
- To be screwed or nailed on

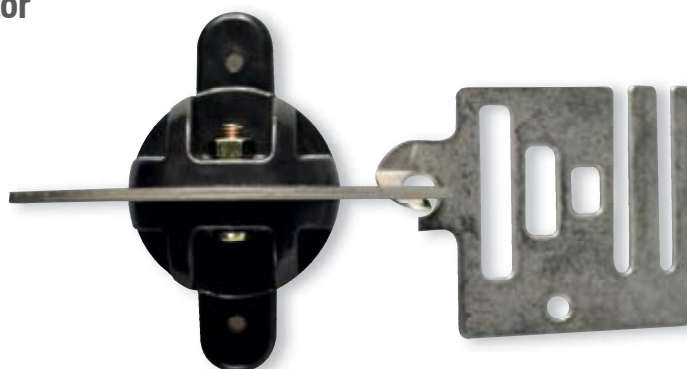
Part no. **15307C** EAN **4 014803 405951** Piece **2**



Gate handle insulator with tape connector

- Gate handle insulator with metal plate and tape connector
- The tape can be attached easily
- To be screwed-in or nailed on

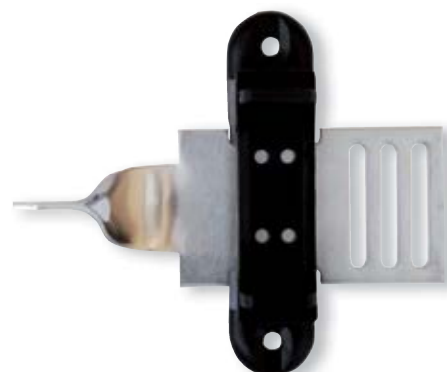
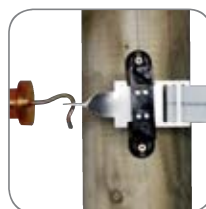
Part no. **14047C** EAN **4 014803 140470** Piece **2**



Gate handle insulator

- With metal plate and tape connection for tape 40mm
- The tape can be attached easily
- All gate handles with hooks can be hooked in easily

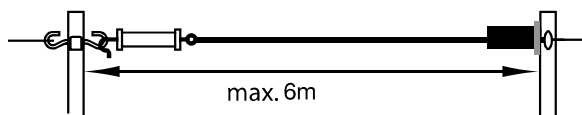
Part no. **14358C** EAN **4 014803 143587** Piece **1**



Gate handle set with tape, 40mm

- Special gate handle set which allows trouble free opening without ground contact
- 40mm wide tape automatically rolls back if gate is opened
- Extendable up to 6m
- Rope is conducting electrica up to the take up reel
- Set contains: wall- / postmounting, gate handle and tape

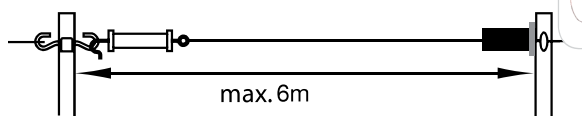
Part no. **14351C** EAN **4014803143518** Piece **1**



Gate handle set with 6mm PE rope

- Special gate handle set which allows trouble free openings without ground contact
- Rope automatically rolls back if gate is opened
- Extendable up to 6m
- Tape is conducting electrica up to the take up reel
- Set contains: wall- / postmounting, gate handle and rope

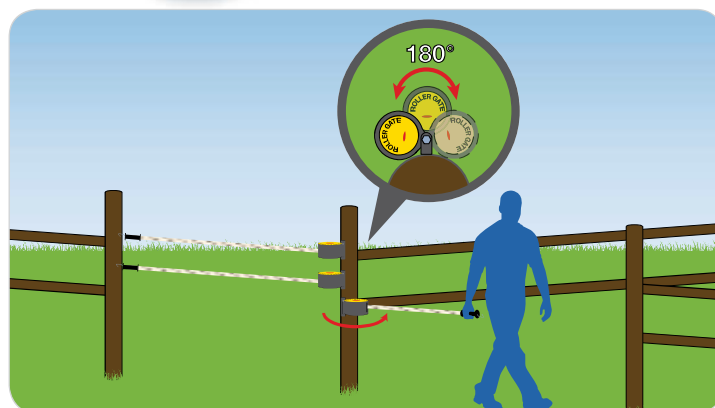
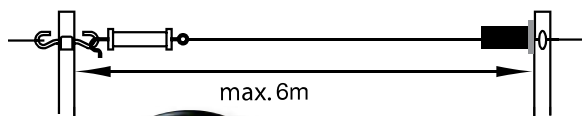
Part no. **14352C** EAN **4014803143526** Piece **1**



Pivoting gate handle set with tape, 40mm

- Special gate handle set which allows trouble free opening without ground contact
- Handle set is turnable by 180°
- 40mm wide tape automatically rolls back if gate is opened
- Extendable up to 6m
- Tape from the gate handle hook up to the take up reel electrified
- When the tape is wound up, it is weather resistant
- Set contains: wall- / postmounting, gate handle and tape

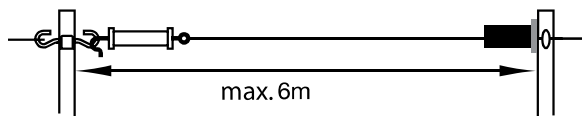
Part no. **14901C** EAN **4014803149015** Piece **1**



Pivoting gate handle set with 6mm PE rope

- Special gate handle set which allows trouble free opening without ground contact
- Handle set is turnable by 180°
- 6mm wide rope automatically rolls back if gate is opened
- Extendable up to 6m
- Tape is from the gate handle hook up to the take up reel is electrified
- When the tape is wound up, it is weather resistant
- Set contains: wall- / postmounting, gate handle and tape

Part no. **14902C** EAN **4014803149022** Piece **1**





Automatic gate handle set 1.80m and 3.60m

Set consists of two retractable electrificable barriers, each 180cm long or 360cm long with two hinges to install to all posts. This set enables the driver of agricultural vehicles to drive through the barrier easily and safely without leaving the vehicle to open the gate. After driving through, the barrier will retract back into the original position. Includes two insulated gate handles for pedestrians.

Gate set, 1 x 1.80m

Part no. **14059** EAN **4 014803 140593** Piece **1**

Gates set, 2 x 1.80m

Part no. **14060** EAN **4 014803 140609** Piece **1**



Barrier for gate set, 1.80m

Part no. **14081** EAN **4 014803 140814** Piece **1**

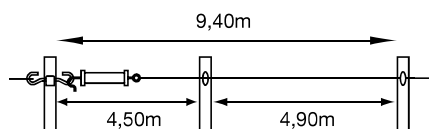
Hinge

Part no. **14878** EAN **4 014803 148780** Piece **1**



Gate handle set with elastic, electrificable rope

Includes 1 gate handle with hook, 1 rope 4.50m extendable up to 9.40m, 1 ring insulator and 1 gate handle insulator.



Hint!

At gates, the electricity should not be transmitted to the gate handle.

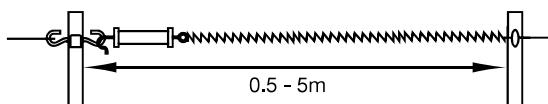
Part no. **15316C** EAN **4 014803 153167** Piece **1**



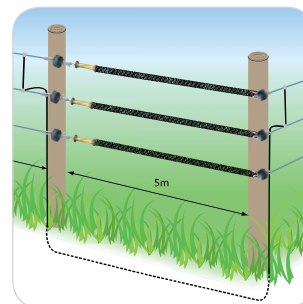
Gate handle set with spring

- Allows opening without ground contact, extendable up to five meters
- Conductive spring
- Set includes: 1 gate handle with hook, 1 special galvanized spring, 1 gate handle insulator and 1 ring insulator

Part no.	EAN	Piece
15416	4 014803 154163	1
15416C	4 014803 405708	1



Ideal for cattle breeding!



Spring, single

Part no.	EAN	Piece
15487	4 014803 154873	1



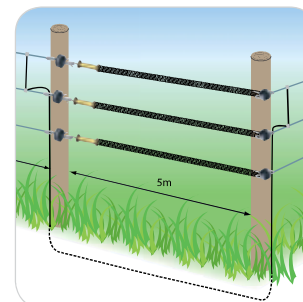
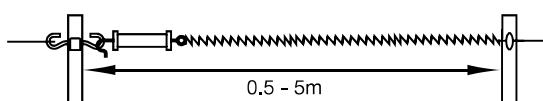
Gate handle set with spring

- Allows opening without ground contact, extendable up to five meters
- Conductive spring
- Set includes: 1 gate handle with hook, 1 special galvanized spring, 1 gate handle insulator and 1 ring insulator

Part no.	EAN	Piece
15291	4 014803 152916	1
15291C	4 014803 420442	2



Ideal for cattle breeding!



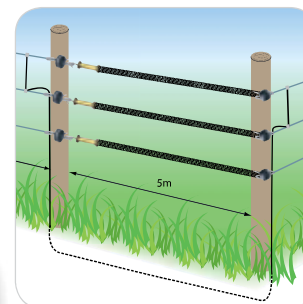
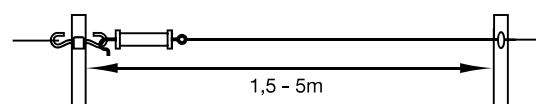
Gate handle set

- Gate handle set extendable up to 5 meters. The kit includes an elasticated electrical rope, a gate handle connection plus three gate handle insulators
- Two metal rings at both ends of the rope attach the mounted gate handle and gate handle insulator
- Conductive rope
- Allows opening without ground contact, extendable up to five meters

Part no.	EAN	Piece
15342	4 014803 153425	1
15342C	4 014803 436795	1



Ideal for horses!





MAXI ROLLER 2000

The plastic reel is particularly suitable for winding and unwinding polywires and tapes. Can be separated into 2 pieces with lead through for the wire, conic centre, robust brake.

Plastic reel

Part no.	EAN	Piece
15013	4 014803 150134	1



Support part for 15013

Part no.	EAN	Piece
15031	4 014803 150318	1

Capacity twine:	to max. 2 000m
Capacity tape:	to max. 750m
Wire lead through:	yes
Brake:	yes

MAXI ROLLER 4000

This extra large reel is particularly suitable to wind and unwind polytapes. Can be separated into 2 pieces with lead through for the wire, conic centre, robust brake.

Plastic reel

Part no.	EAN	Piece
15839	4 014803 158390	1



Support part for 15839

Part no.	EAN	Piece
15840	4 014803 158406	1

Capacity twine:	to max. 4 000m
Capacity tape:	to max. 1 500m
Wire lead through:	yes
Brake:	yes



Plastic reel

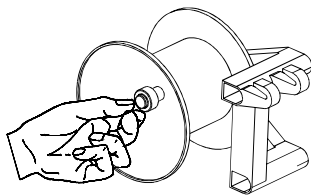
»SUPER ROLLER 1000«

- Reel made of premium plastic
- With brake and fence hooks to hang the reel onto fence wire

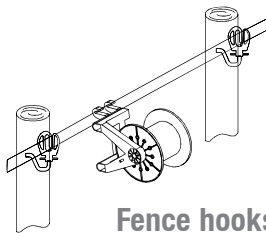
Part no.	EAN	Piece
14168		1

UV

Capacity twine:	to max. 1 000m
Capacity tape:	to max. 600m
Connection for tape:	yes
Brake:	yes



Brake:
to fix drum



Fence hooks:
to hang the reel onto fence wire



SUPER ROLLER 500

- Compact reel made of high quality plastic with brake and mounting bracket

Part no.	EAN	Piece
15289		1

UV

Spare reel

Part no.	EAN	Piece
14052		1

Capacity twine:	to max. 500m
Capacity tape:	to max. 300m
Connection for tape:	yes
Brake:	yes



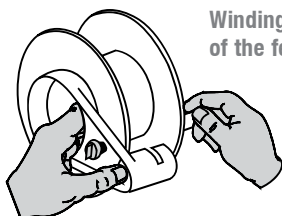
MINI ROLLER 500 PC

- Made of high quality, UV-stabilised polycarbonate
- With brake and fence hooks, to hang the reel onto fence wire
- Ideal for mobile fences

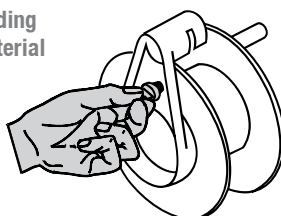
Part no.	EAN	Piece
10109		1

UV PC

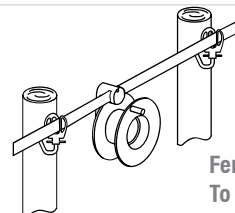
Capacity twine:	to max. 500m
Capacity tape:	to max. 300m
Connection for tape:	yes
Brake:	yes



Winding or unwinding
of the fencing material



Brake:
to fix drum



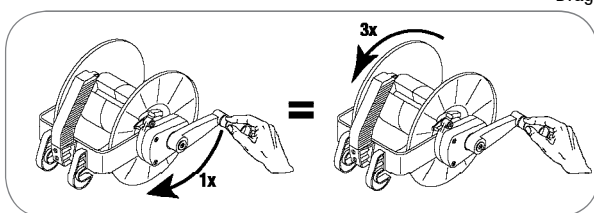
Fence hooks:
To hang the reel onto fence wire.

TURBO ROLLER 3 : 1

- Reduces workload and time
- Very solid plastic
- Strong steel crank handle and frame
- Fixing break
- Return stop
- Hooks to hang up

Part no.	EAN	Piece
13041		1

Capacity twine:	According to type up to max. 800m
Capacity tape:	According to width up to max. 300m
Wire lead through:	yes
Break:	yes



Drag brake



Fence hooks



Ratchet lock






Winding or unwinding of the fencing material

TURBO ROLLER 1500

Designed to form the complete portable fence assembly with up to three reels, post and reel mounting brackets. Reels are available separately and can be used independently or mounted on the post. The system consists of:

- Reel, for polywire, tape or rope, complete with handle, lock and brake
- Reel mounting post
- Reel mounting bracket

Part no.	Product	EAN	Piece
15340	plastic reel super		1
13042	reel mounting, 117cm, single		1
13043	reel mounting, single		1

Capacity twine:	According to type up to max 1 500m
Capacity tape:	According to width up to max 600m
Wire lead through:	yes
Brake:	yes



SMART post

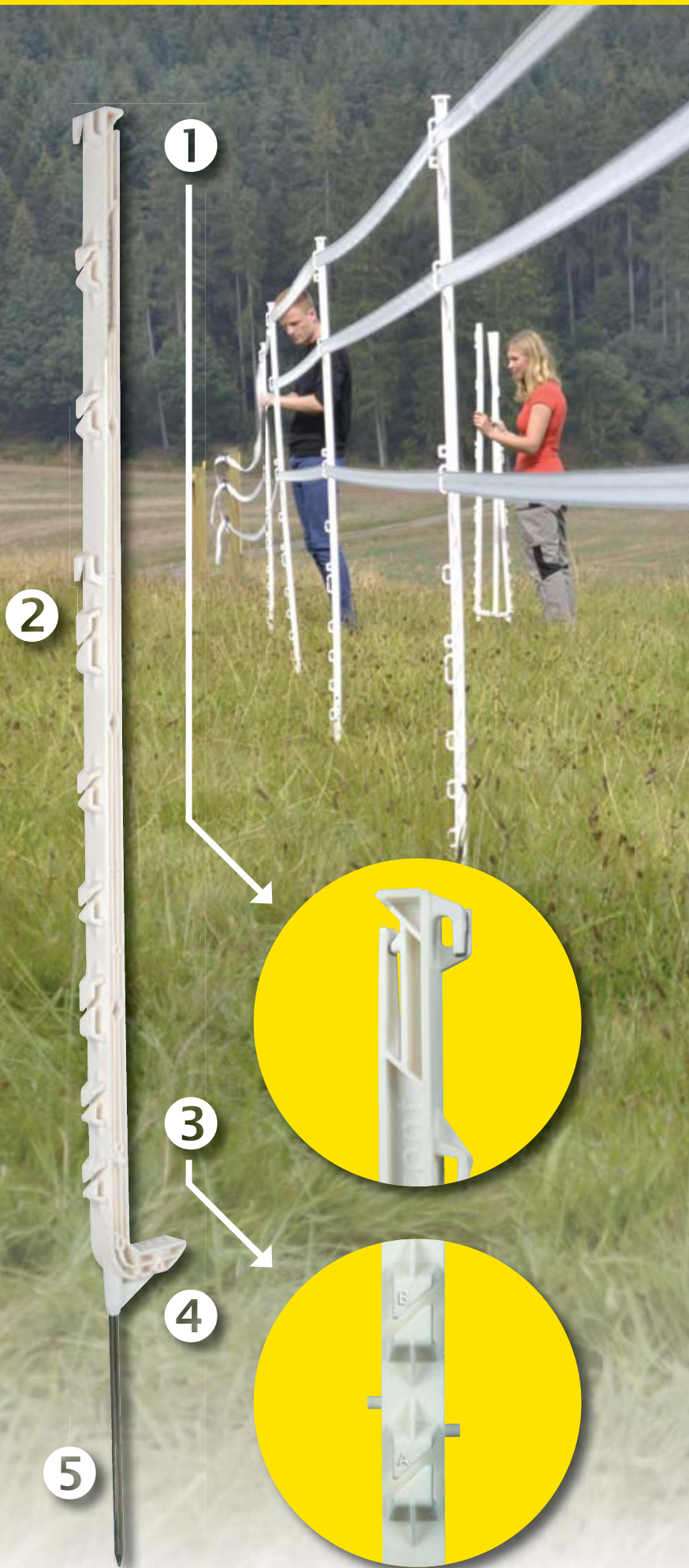
The new premium post „SMARTpost“ is manufactured from high-grade polypropylene with improved stability and impact resistance – especially for customers who wish to have a minimal effort and a high degree of safety for their animals.

While developing the new post family, the engineers and sales professionals considered very positive experiences of our customers with our widely known „extra“ post. Important elements, such as the unique patented stepper pad of the extra post were included in the new post family and improved even further.

The shape of the post incorporated design taken from high rise buildings and is tapered upwards. A strong and long nail is injected into the post for the ground anchor and provides the posts with a secure foundation.

1. Two insulators at the top – optimal utilisation of the entire post length
2. Extremely solid and durable loops for tapes, ropes and wires
3. Numbered loops which facilitates the installation – especially the installation in large fields.
4. Fortified footstep with textured finish to avoid slipping
5. Solid, deeply galvanized, solid nail of 9mm diameter, 23cm length. A long-life cycle and a stable foundation.

colours: white and green, each available in a bunch of 5 or 10





SMARTpost

- Premium post
- Two insulators at the pile tip – optimal utilisation of the post length
- Extremely solid and durable loops for tapes, ropes and wires
- Numbered loops which facilitates installation
- Additionally fortified footstep including a textured finish which avoids slipping
- Solid, deeply galvanized, solid nail of 9mm diameter, 23cm length

white, total length 78cm, with 6 loops

Part no.	EAN	Piece
14490-5	4014803450180	5
14490-10	4014803444904	10

green, total length 78cm, with 6 loops

Part no.	EAN	Piece
14490-5GN	4014803450210	5
14490-10GN	4014803450241	10

white, total length 115cm, with 11 loops

Part no.	EAN	Piece
14491-5	4014803450197	5
14491-10	4014803444911	10

green, total length 115cm, with 11 loops

Part no.	EAN	Piece
14491-5GN	4014803450227	5
14491-10GN	4014803450258	10

white, total length 145cm, with 13 loops

Part no.	EAN	Piece
14492-5	4014803450203	5
14492-10	4014803444928	10

green, total length 145cm, with 13 loops

Part no.	EAN	Piece
14492-5GN	4014803450234	5
14492-10GN	4014803450265	10

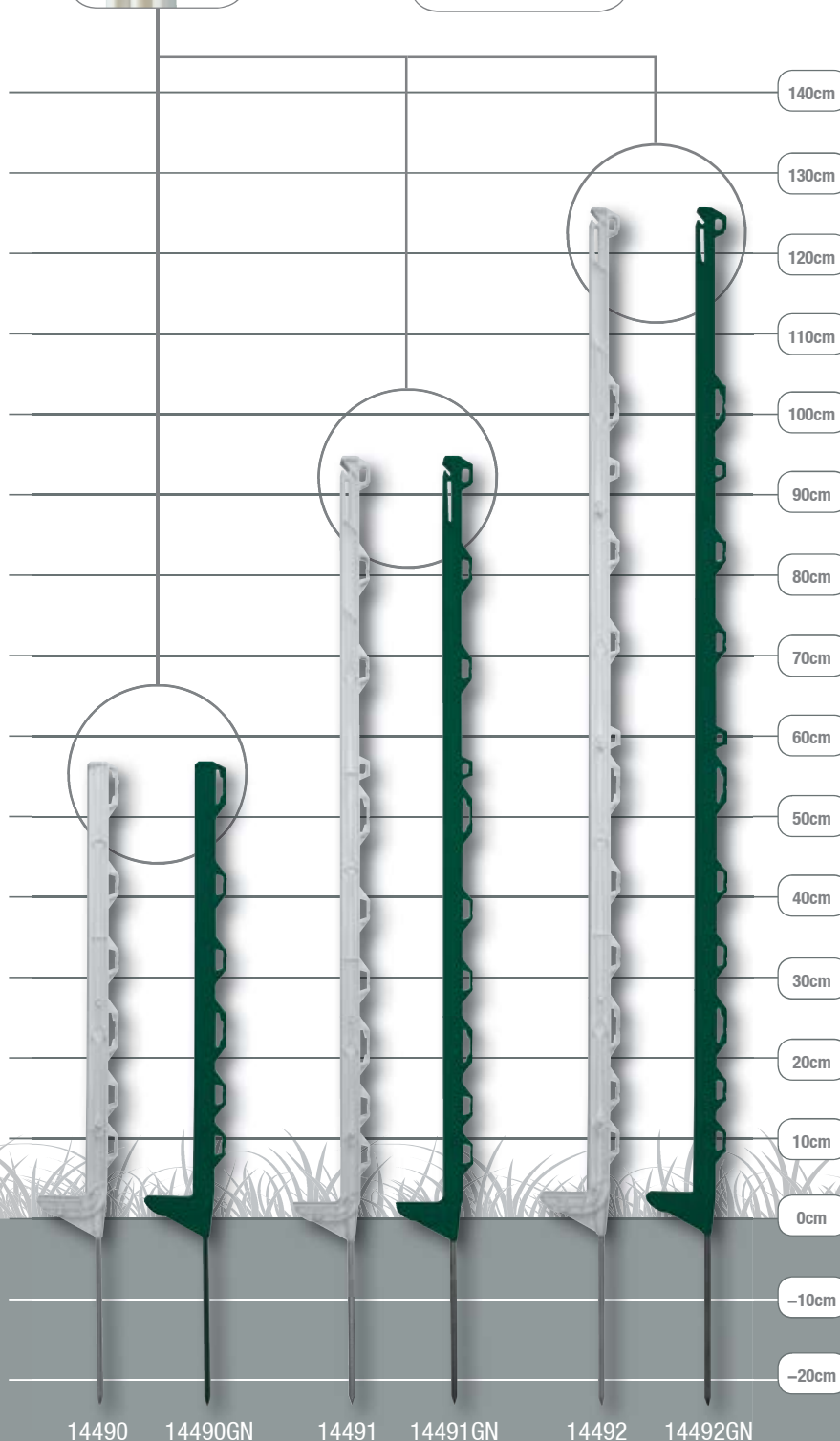
HIGHLIGHT
★★★★★



Two insulators at the top
– optimal utilisation of the
post length



Extremely solid!



14490 14490GN 14491 14491GN 14492 14492GN

Plastic fence post

»standard«

- With loops for tapes up to 40mm, wires / ropes
- Additional insulator right above the foot plate for an earth return wire
- 104cm and 138cm posts available in green

white, total length 138cm, with 12 loops

Part no. EAN Piece
15695 4 014803 156952 10

green, total length 138cm, with 12 loops

Part no. EAN Piece
15695GN 4 014803 426651 10

white, total length 104cm, with 10 loops

Part no. EAN Piece
15198 4 014803 003041 10

15198P 4 014803 423788 600

green, total length 104cm, with 10 loops

Part no. EAN Piece
15198GN 4 014803 426640 10

white, total length 75cm, with 7 loops

Part no. EAN Piece
14135 4 014803 141354 10

horizont polyposts »extra« best possible application for all kind of practise

- With loops for tapes up to 40mm, wires and ropes
- Extra long footplate
- Very solid construction due to additional bracings
- Reinforced foot plate which makes the foot plate unbreakable
- Additional insulator right above the foot plate for an earth return wire
- 75cm, 108cm and 142cm posts also available in green

lime, total length 142cm, with 12 loops

Part no. EAN Piece
15545HG 4 014803 444663 10

purple, total length 142cm, with 12 loops

Part no. EAN Piece
15545LI 4 014803 441768 10

turquoise, total length 142cm, with 12 loops

Part no. EAN Piece
15545TU 4 014803 441690 10

HIGHLIGHT

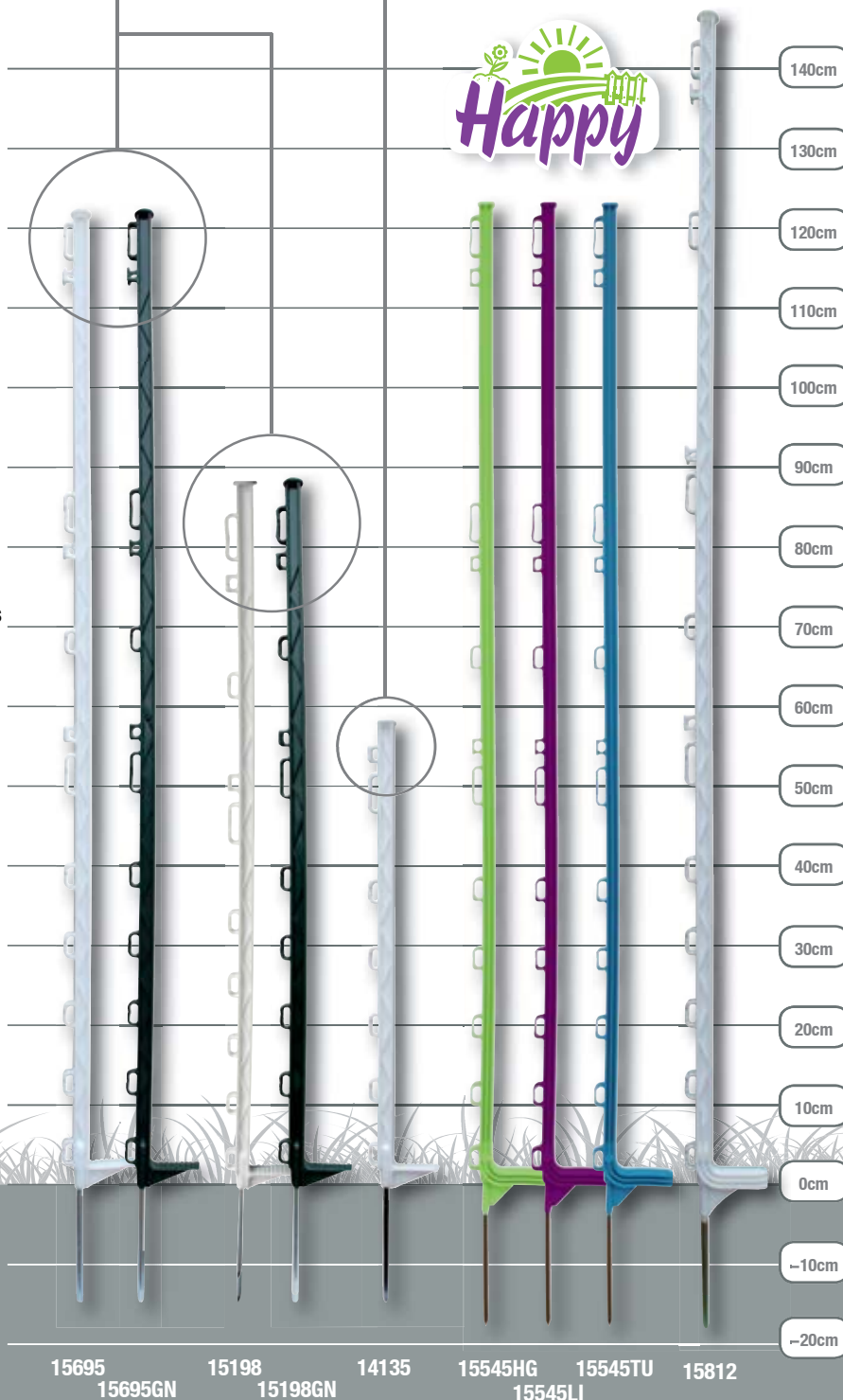


white, total length 169cm, with 13 loops

Part no. EAN Piece
15812 4 014803 158123 10

All posts have integrated loops for tapes up to 40mm and ropes up to 8mm ø

All posts have integrated loops for tapes up to 40mm and ropes up to 8mm ø



Fibre-glass posts

- Very solid and durable posts
- Suitable for all insulators for 10 and 12mm posts (14046, 15129, 15290, 15474, 15480, 17804F, 17801F, 14903 und 14904) (see p. 126)

white, total length 115cm, 10mm

Part no. EAN Piece

14885  **25**

yellow, total length 125cm, 12mm

Part no. EAN Piece

14886  **10**

white, total length 135cm, 10mm

Part no. EAN Piece

14887  **25**

white, total length 150cm, 10mm

Part no. EAN Piece

14888  **25**

- With galvanized insulator
- With galvanized stake

Galvanized Insulators „MASTER CLIP“

- For fibre-glass posts 14886

for round posts 12mm ø

Part no. EAN Piece

14903C  **25**

Part no. EAN Piece

14903-100  **100**

- For fibre-glass posts 14885, 14887, 14888

for round posts 10mm ø

Part no. EAN Piece

14904C  **25**

Part no. EAN Piece

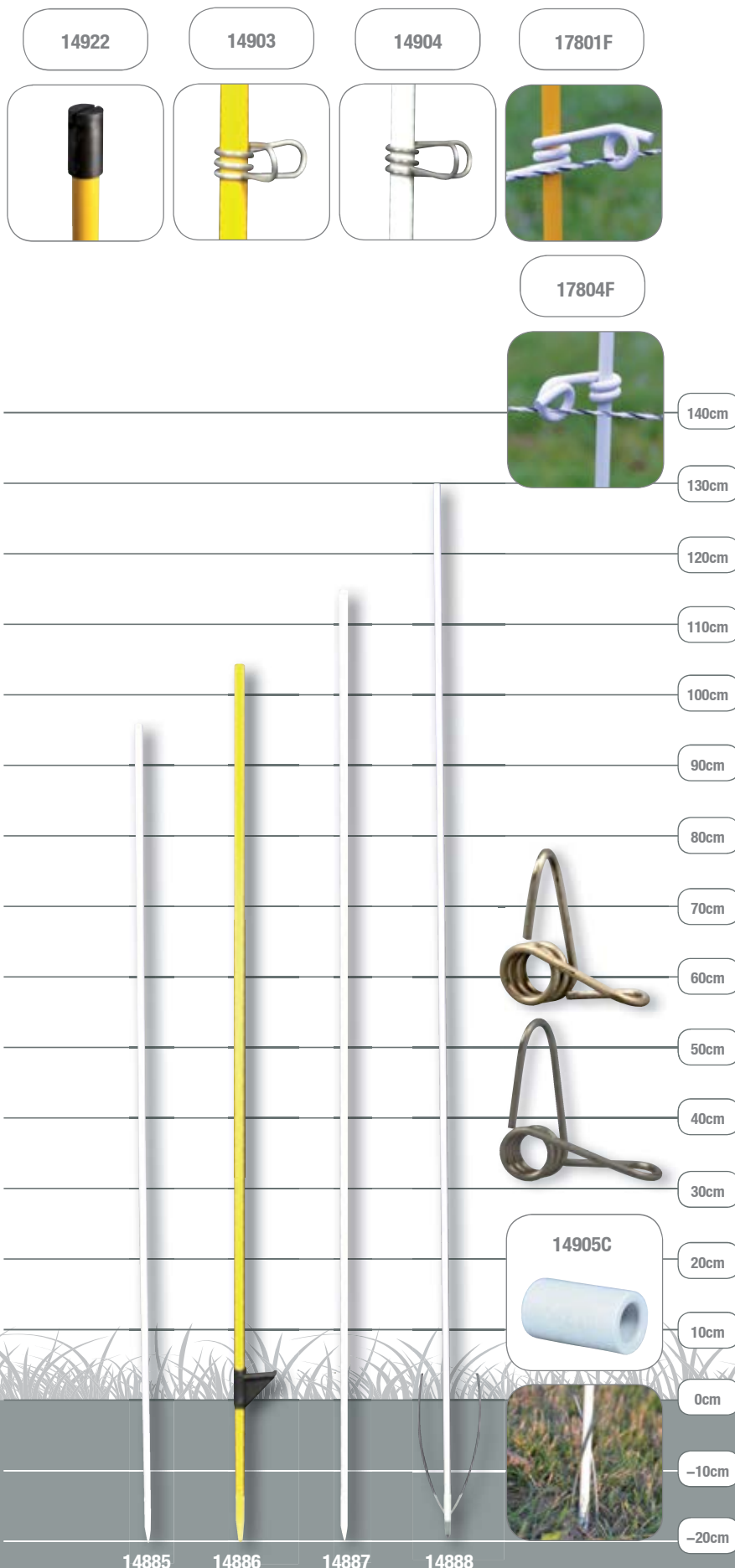
14904-100  **100**

Impact aid

- Recommended for fibre-glass post 10–12mm
- Protects the post while driving into the ground with a hammer

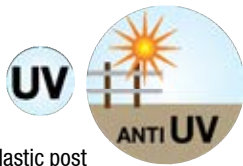
Part no. EAN Piece

14905C  **1**



14885 14886 14887 14888

Plastic post
»Little Pig«



- Extremely light full plastic post
- UV-stabilized
- Low torsion profile
- For twines and tapes up to 13mm
- 20 pcs. per carton

black, total length 72cm

Part no. **14839** EAN **4 014803 148391** Piece **20**

Information on insulator see p. 126



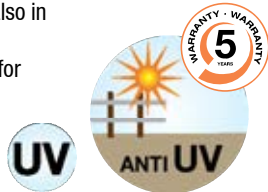
With these loops it is easy to put in the material and it will not spring out



Plastic post »super«

Best possible application for all kind of practise

- Made of high quality special plastic – thereby frost-resistant
- With strong galvanized foot (at 10090 spike) for best stability also in hard ground
- 5 years warrenty for UV-stability



white, 19mm ø, total length 106cm, without footplate

Part no. **15375** EAN **4 014803 153753** Piece **25**

white, 19mm ø, total length 146cm, without footplate

Part no. **15376** EAN **4 014803 153760** Piece **10**

white, 19mm ø, total length 171cm, with footplate

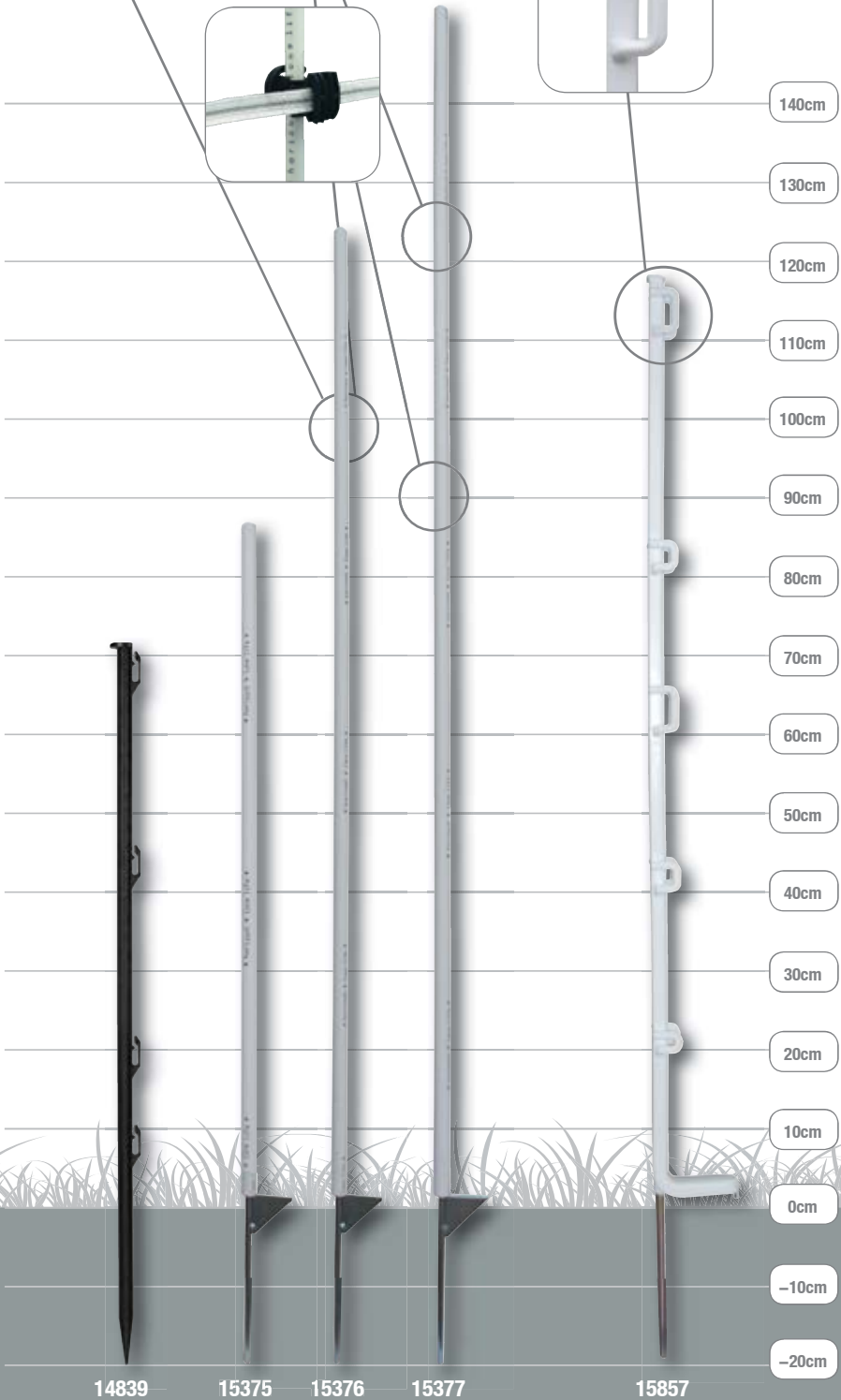
Part no. **15377** EAN **4 014803 153777** Piece **10**

pro-line security post

The pro-line security post from horizont has a length of 117cm above ground. With their unique loop design the professional solution when you want to insert tapes, wires and ropes up to 40mm easily and quickly and if you do not want the material to detach.

white, total length 136cm

Part no. **15857** EAN **4 014803 158574** Piece **10**



14839 15375 15376 15377 15857

Stirrup post

- The stirrup allows an easy and secure tread into the ground
- Fibre-glass strengthened PP
- UV-stabilized
- With strong 8mm nail



white, total length 115cm, with 10 loops

Part no.	EAN	Piece
15109	4 014803 151094	20
15109P	4 014803 111111	500

green, total length 115cm, with 10 loops

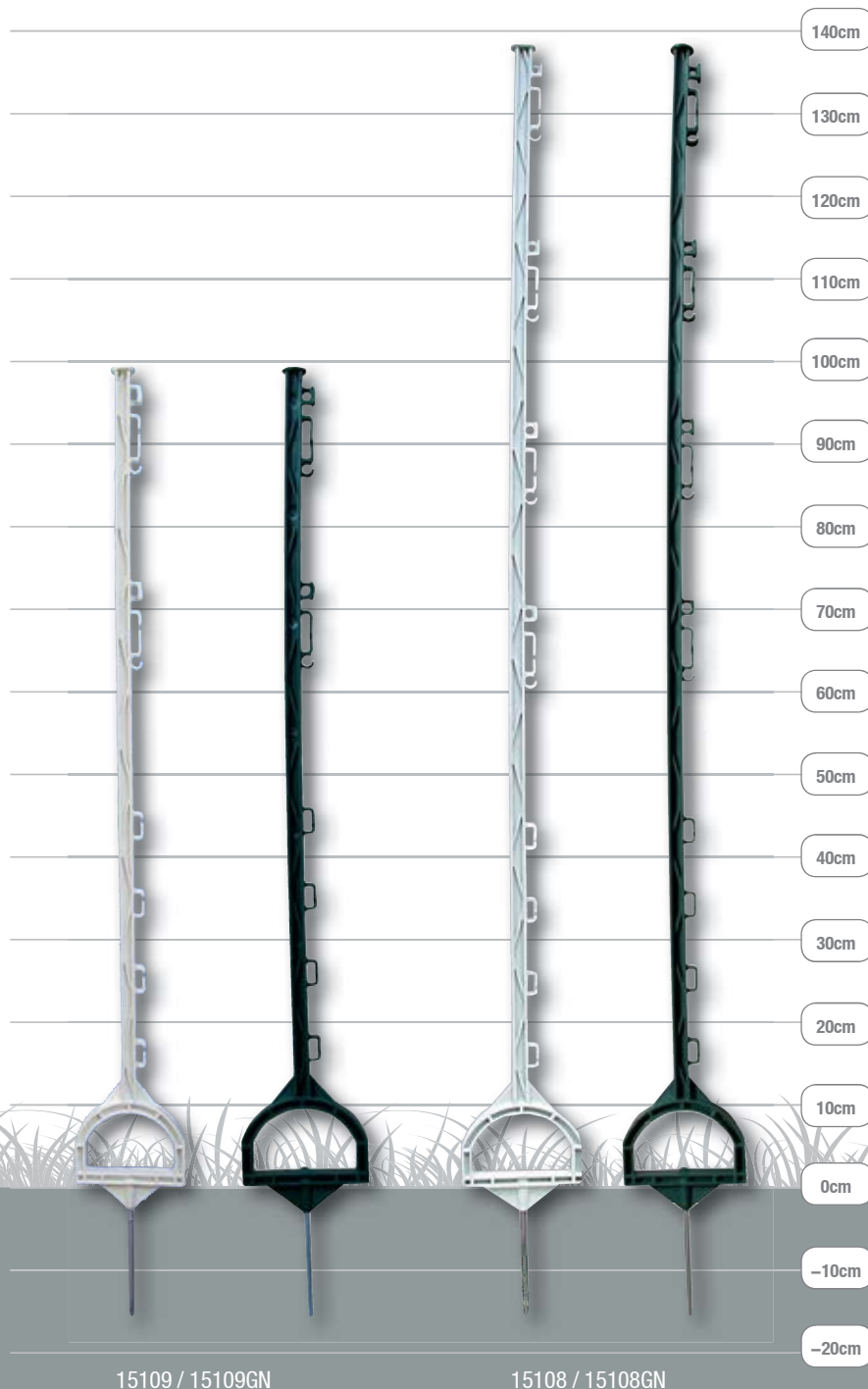
Part no.	EAN	Piece
15109GN	4 014803 432331	20

white, total length 155cm, with 16 loops

Part no.	EAN	Piece
15108	4 014803 151087	20
15108P	4 014803 424112	360

green, total length 155cm, with 16 loops

Part no.	EAN	Piece
15108GN	4 014803 432384	20



15109 / 15109GN

15108 / 15108GN

Steel post with big loop insulator

- With foot thread
- 7mm thick
- With white finishing

total length 105m

Part no.	EAN	Piece
14179	4 014803 1141798	30

Oval steel post

- With footplate and insulator

red, metal loop, total length 105cm

Part no.	EAN	Piece
150561	4 014803 1432810	25

red, ring insulator, total length 105cm

Part no.	EAN	Piece
150551	4 014803 1432803	25

Steel fence posts

Angle steel posts extremely solid and long lasting posts, enable firm and solid corners even on dry ground. Footplate fully soldered

red, total length 115cm, 4 drillings, side thickness 2mm

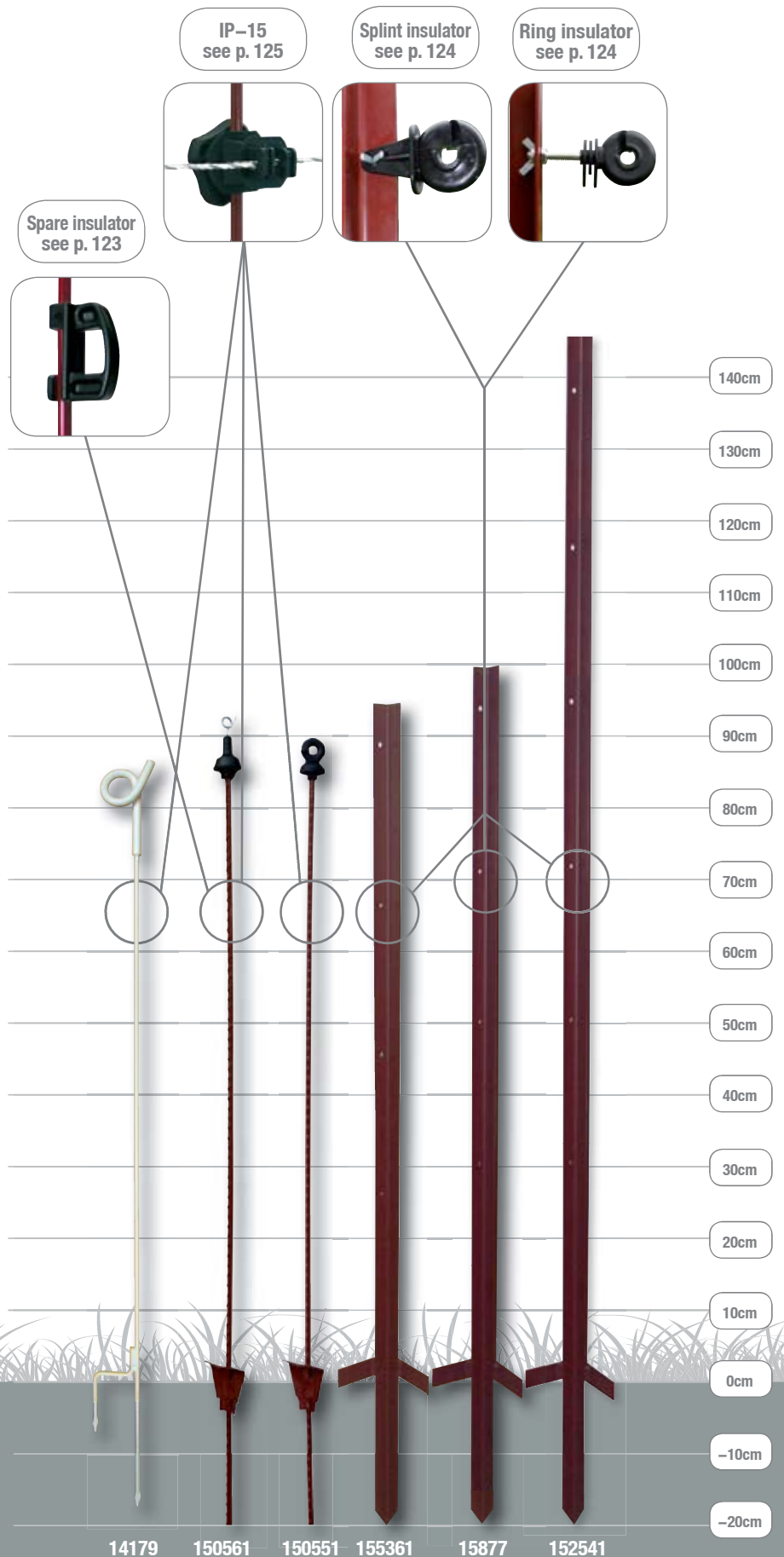
Art.-Nr.	EAN	Piece
15536	4 014803 1155368	10

red, total length 120cm, 4 drillings, side thickness 3mm

Part no.	EAN	Piece
158771	4 014803 011794	10

red, total length 150cm, 5 drillings, side thickness 3mm

Part no.	EAN	Piece
15254	4 014803 1152541	10



* Minimum purchase 3 bunches!

14179 150561 150551 155361 15877 152541

Nets

HIGHLIGHT



Prevention against the wolf provided by our special wolf defens system.

Recommended by:



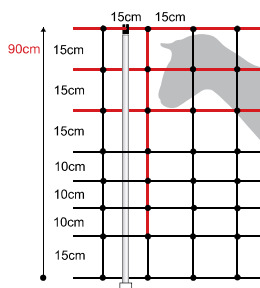
> p. 150–151

Nets can be used quickly and safe for many applications. Sheeps and goats can be protected from the wolf violation with our wolf netting.

HIGHLIGHT



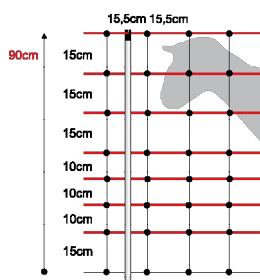
High energy
Vertical netting high energy.
For sheeps – even under difficult conditions.
> page 146



HIGHLIGHT



Proved classic
horiNetz 90 cm
> page 149



HIGHLIGHT



Unique
Unique permanent fencing system with an easy clip-protection at the permanent fence wire
> page 155 / 159



Chapter

Page

Nets & Permanent fencing I 146 –
Nets 154

Nets & Permanent fencing I 155 –
Permanent fencing 159





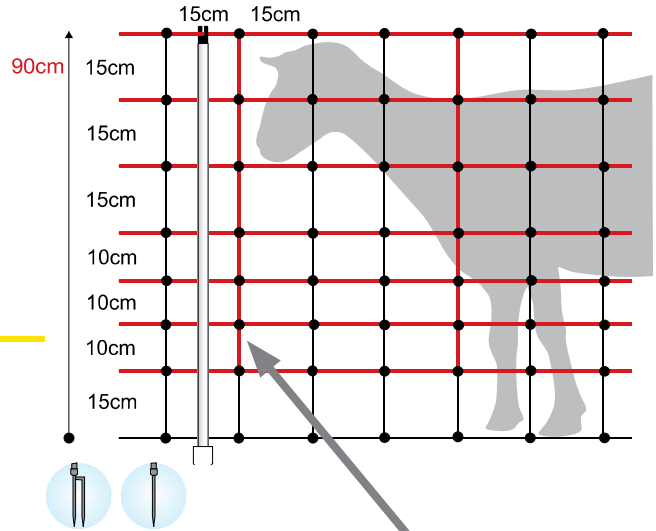
Vertical netting

Two of the 7 horizontal twines are with copper connectors. These connectors secure as a ring loop a high electrical conductivity and therefore a high current flow in the netting. Coming from these ring loops are vertical twines crossing all the seven horizontal twines and assure the reconnection for a high current flow.

Unique netting which follows the **horizont patent**

You get more safety due **to more power** on the netting

Vertical current flow ensures **constant power**



Even when wires break, due to the vertical current flow the netting is always powered!
The complete netting is powered!

horizont-quality
with copper conductors!

HIGHLIGHT



Vertical netting for sheeps, 90cm, 50m

- Complete with connection kit and 14 posts
- Colour of posts: white
- Colour of wire: yellow and black

Part no.	Product	Ω / m	EAN	Piece
14364	Vertical netting with single prong	0.17	4 014803 143648	1
14365	Vertical netting with double prong	0.17	4 014803 143655	1
15022-1	Post with single prong		4 014803 150226	1
15022-2	Post with double prong		4 014803 403278	1

HIGHLIGHT



Vertical netting high energy for sheeps, 90cm, 50m*

- Complete with connection kit and 14 posts
- Colour of posts: white
- Colour of wire: yellow (conducting) respectively black (not conducting)

Part no.	Product	Ω / m	EAN	Piece
14502	Vertical netting with double prong	0.35	4 014803 145024	1
15022-1	Post with single prong		4 014803 150226	1
15022-2	Post with double prong		4 014803 403278	1

High energy even with high vegetation

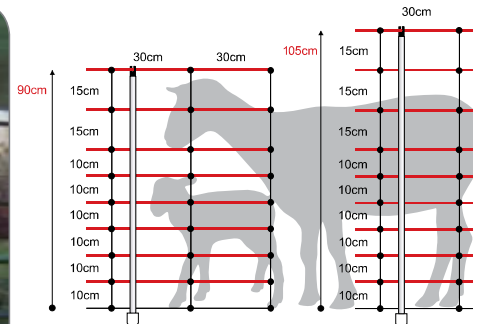
Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
Vertikal netting 14364	✓		90cm	50m	14	8	7	1
Vertikal netting 14365		✓	90cm	50m	14	8	7	1
Vertikal netting high energie 14502		✓	90cm	50m	14	8	3	5



Sheep

Contains 9 electroplastic twines, 8 of which are electrifiable. Livestok incorporates a semi-rigid plastic vertical strut every 30cm instead of plain polytwine. Keeps its shape well over more contoured ground. Yellow struts and black twine ground.

Part no.	Ω / m	EAN	Piece
18011	1.1	4 014803 180117	1

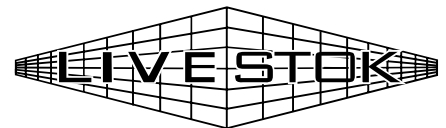


Goat / Super Sheep

Contains 10 electroplastic twines, 9 of which are electrifiable. Extra height and control for goats and sheep. Available in yellow/black and white.

Part no.	Ω / m	EAN	Piece
18013	0.84	4 014803 180131	1

Attention: Never connect more than 1 fencer to your netting!

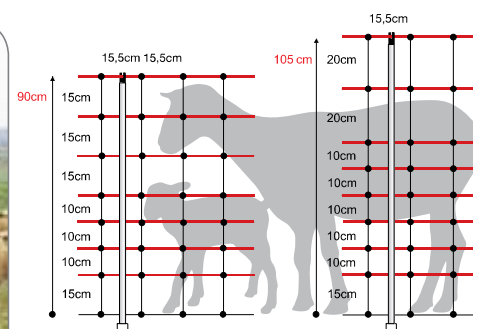


Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires:	of which are electrifiable	not conducting twines
18011	✓		90cm	50m	14	9	8	1
18013	✓		105cm	50m	14	10	9	1

Sheep

Contains 8 electroplastic twines, 7 of which are electrifiable. Properly electrified, nothing is more efficient in temporary and semi-permanent strip or paddock grazing of sheep and lambs. Flocks are also protected within electric netting – from foxes or dogs – more securely than any other form of lightweight electric fencing. Reinforced top twine. 14 posts.

Part no.	Ω / m	EAN	Piece
18002	1.15	4 014803 180025	1



Goat / Super Sheep

Taller by 15cm than sheep netting and containing 9 electroplastic horizontal lines, 8 of which are electrifiable. For greater control of sheep and goats. 14 posts.

Part no.	Ω / m	EAN	Piece
18003	1.01	4 014803 180032	1

Attention: Never connect more than 1 fencer to your netting!



Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires:	of which are electrifiable	not conducting twines
18002	✓		90cm	50m	14	8	7	1
18003	✓		105cm	50m	14	8	7	1

Nets & Permanent fencing

turbomax energy-netting for sheep



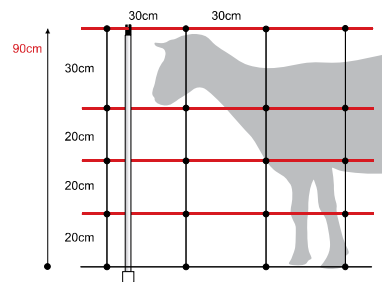
turbomax

- special vertical connections made of polyethylene provide a very high stability
- complete with 14 posts and connection kit
- colour of posts: white
- colour of wire: white/black (chrome- / nickel-wire) respectively white/green (copper-wire)



turbomax high energy-netting, 90cm, 50m*

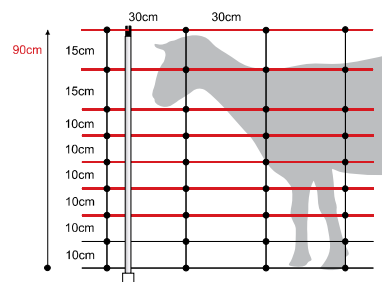
- Especially suitable for rough territories and mountains
- Lightweight netting
- High energy due to a reduced number of horizontal wires



Part no.	Product	Ω / m	EAN	Piece
14503	High energy-netting with double prong	0.33	4 014803 145031	1
15022-1	Post with single prong	0.33	4 014803 150226	1
15022-2	Post with double prong		4 014803 403278	1

turbomax energy-netting for sheep, 90cm, 50m*

- Both bottom wires are non-current-carrying. As a result, the other electrified wires have less contact to the vegetation and the energy loss over the vegetation is limited
- The netting is constructed in the same way as the turbomax extra



Part no.	Product	Ω / m	EAN	Piece
14955	Energy-netting with single prong	0.36	4 014803 149558	1
15022-1	Post with single prong		4 014803 150226	1
15022-2	Post with double prong		4 014803 403278	1



Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
turbomax high energy 14503		✓	90cm	50m	14	5	4	1
turbomax energy 14955	✓		90cm	50m	14	8	6	2



horinetz

- complete with 14 posts and connection kit.
- colour of posts: white
- colour of wire: yellow (conducting) respectively black (not conducting)
- colour of cap pieces: cap at the first post yellow, others black
- yellow knotting–points
- Monofilaments: 3 x 5 Monofilaments à 0.40mm, upper and bottom wire strengthened.
- conductor: 3 x 0.20mm stainless steel.

Hint !

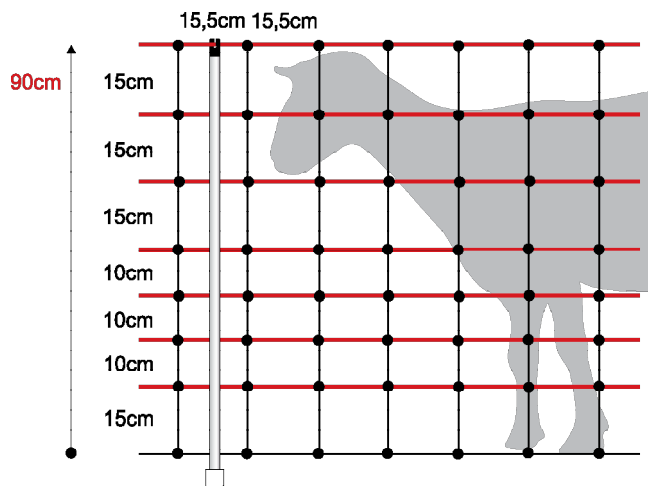
We recommend our hotSHOCK energisers in compliance with electrified nets. (see p. 27 – 30).



horinet energy–netting for sheeps, 90cm, 50m*



- Both bottom wires are non-current-carrying. As a result, the other electrified wires have less contact to the vegetation and the energy loss over the vegetation is limited
- The netting is constructed in the same way as the hori–Net



Part no.	Product	Ω / m	EAN	Piece
14954	Netting with single prong	1.35	4 014803 149541	1

Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
horinetz energy 14954	✓		90cm	50m	14	8	6	2



Have a look at our YouTube–channel!

Our netting professional is explaining the most effective way to build a perfect net for sheeps in a video step by step.

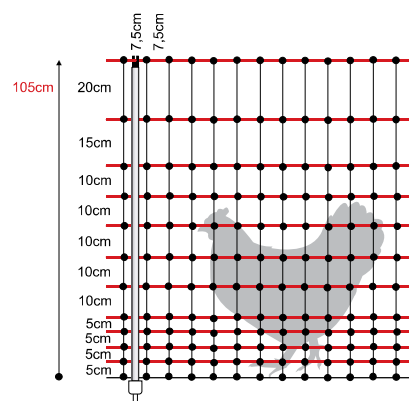
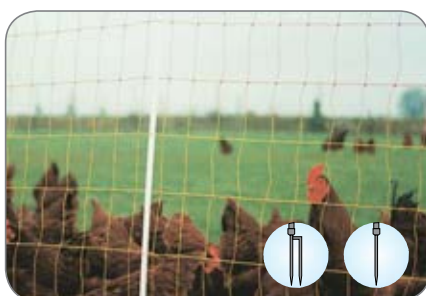
📄 <https://www.horizont.com/sheep.netting>





Super poultry netting, 105cm, 50m

- Complete with connection kit and 15 posts
- Colour posts: white
- Colour wire: yellow or black



Part no.	Product	Ω / m	EAN	Piece
15587	Netting with single prong	0,74	4 014803 155870	1
15026-1	Post with single prong		4 014803 150264	1
15693	Netting with double prong	0,74	4 014803 156938	1
15026-2	Post with double prong		4 014803 150265	1

Attention: Never connect more than 1 fencer to your netting!

Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires:	of which are electrifiable	not conducting twines
15587	✓		105cm	50m	15	12	11	1
15693		✓	105cm	50m	15	12	11	1

Poultry netting



105cm, 25m, with 9 posts, single prong

Part no.	EAN	Piece
18006	4 014803 180063	1

105cm, 50m, with 15 posts, single prong

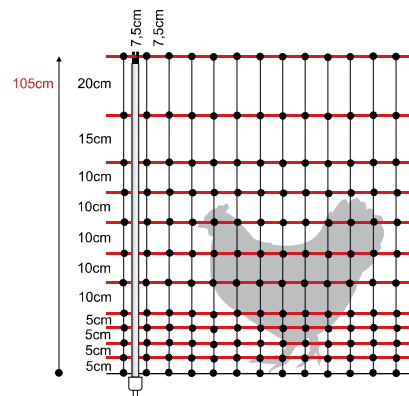
Part no.	EAN	Piece
18018	4 014803 180186	1

105cm, 25m, with 9 posts, green, single prong

Part no.	EAN	Piece
18006GR	4 014803 428547	1

105cm, 50m, with 15 posts, single prong

Part no.	EAN	Piece
18018GR	4 014803 426390	1

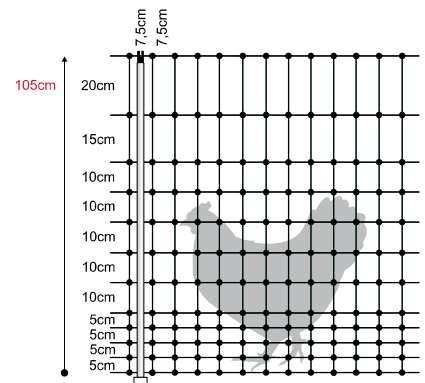
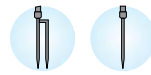


Attention: Never connect more than 1 fencer to your netting!

Part no.	Single prong	Height	Length	No. of posts	Colour of posts	Colour of post caps	Horizontal polywires	of which are electrifiable	Knotting points	Electrifiable polywire	Top polywires	Vertical polywires	Bottom polywire
18006	✓	105cm	25m	9	green (1. post white)	black (1. post cap white)	12	11	black	green	green	green	black
18006GR	✓	105cm	25m	9	green (1. post white)	black (1. post cap white)	12	11	black	green	green	green	black
18018	✓	105cm	50m	15	green (1. post white)	black (1. post cap white)	12	11	black	green	green	green	black
18018GR	✓	105cm	50m	15	green (1. post white)	green (1. post white)	12	11	black	green	green	green	black

Security netting for poultry and other purposes, 105cm, green

- Ideal for poultry, small lakes or non permanent fences
- Contains 12 plastical twines, none of these is electrified, reinforced bottom strand
- Colour of posts and wire: green



DO NOT ELECTRIFY

Part no.	Product	EAN	Piece
34619	25m netting with 9 posts, with single prong	4 014803 346193	1
34618	50m netting with 15 posts, with single prong	4 014803 346186	1
18414	Post with single prong	4 014803 184146	1
34620	50m netting with 15 posts, with double prong	4 014803 346209	1
34621	25m netting with 9 posts, double prong	4 014803 346216	1

Part no.	Single prong	Double prong	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
34619	✓		105cm	25	9	12	–	12
34618	✓		105cm	50	15	12	–	12
34620		✓	105cm	50	15	12	–	12
34621		✓	105cm	25	9	12	–	12

Gate for poultry net

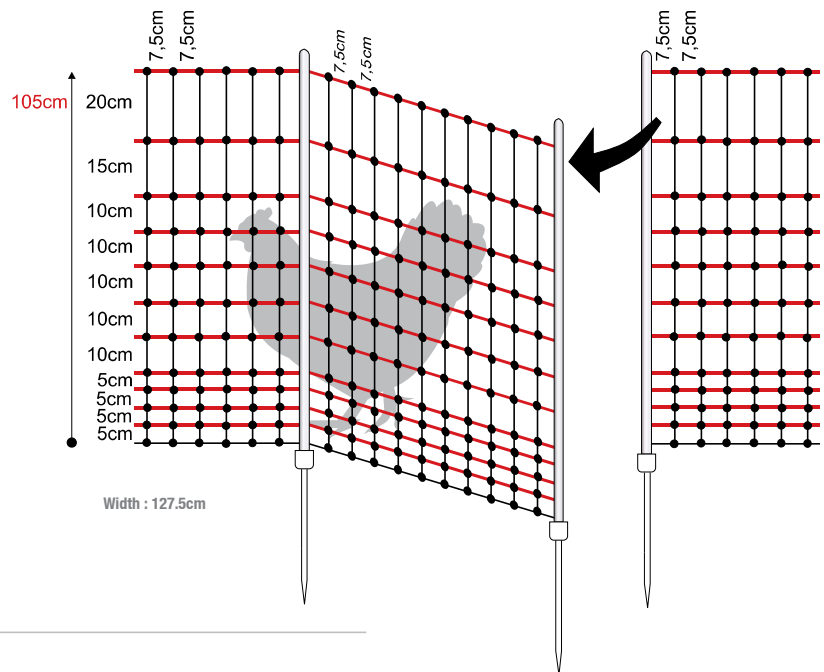
- 105cm, with 2 standard posts (single prong)

for poultry net 15587 and 15693

Part no.	EAN	Piece
14148	4 014803 141484	1

for poultry net 18006GR and 18018GR

Part no.	EAN	Piece
18140	4 014803 181404	1



Gate for poultry net

- Height 105 cm, length 125 cm
- Can be used with all poultry nets
- Electrical gate is connected to the poultry net
- Gate can be opened and closed on to the insulated handles even if the netting is electrified

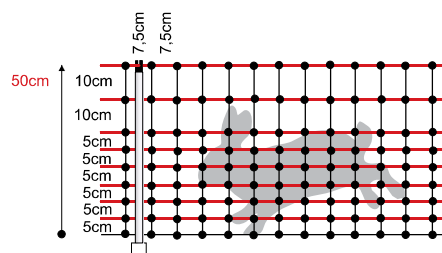
Part no.	EAN	Piece
14935	4 014803 149350	1



Rabbit and cat netting, 50cm, 25m, green*

- Contains 9 electroplastic twines, 8 of which are electrificable, reinforced non-conductive bottom strand
- Colour of posts and wire: green

Part no.	Product	Ω / m	EAN	Piece
15195	Netting with single prong	1.01	4 014803 151957	1
15223	Post with single prong		4 014803 152237	1



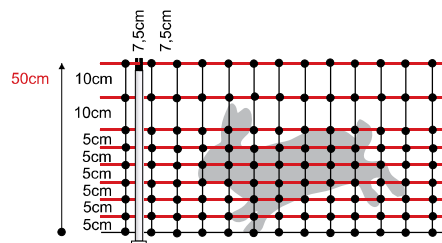
Rabbit netting, 50cm, 25m and 50m*

- Contains 9 electroplastic twines, 8 of which are electrificable, reinforced non-conductive bottom strand
- Colour of posts: white
- Colour of wire: yellow or black



Hint!

Erect the netting towards the fenced area. In this way it is more difficult for rabbits to jump over the netting.

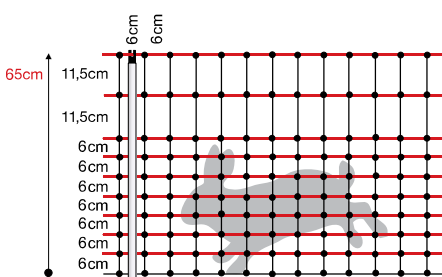


Part no.	Product	Ω / m	EAN	Piece
15576-25	Netting with single prong, 25 m	1.01	4 014803 448118	1
15576	Netting with single prong, 50 m	1.01	4 014803 155764	1
15028	Post with single prong		4 014803 150288	1

Rabbit and cat netting, 65cm, 50m, green*

- Contains 9 electroplastic twines, 8 of which are electrificable, reinforced non-conductive bottom strand
- Colour of posts and wire: green

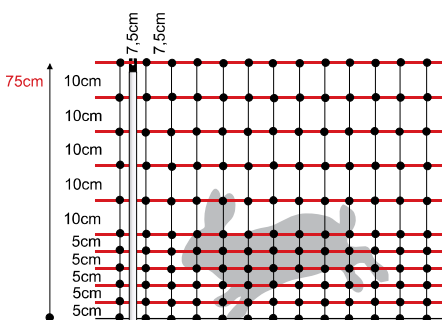
Part no.	Product	Ω / m	EAN	Piece
14895	Netting with single prong	0,90	4 014803 148957	1



Rabbit and cat netting, 75cm, 25m, green*

- Contains 11 electroplastic twines, 10 of which are electrificable, reinforced non-conductive bottom strand
- Colour of posts and wire: green

Part no.	Product	Ω / m	EAN	Piece
15196	Netting with single prong	0,81	4 014803 151964	1
15196-50	Netting with single prong	0,81	4 014803 443014	1
15224	Post with single prong		4 014803 152244	1

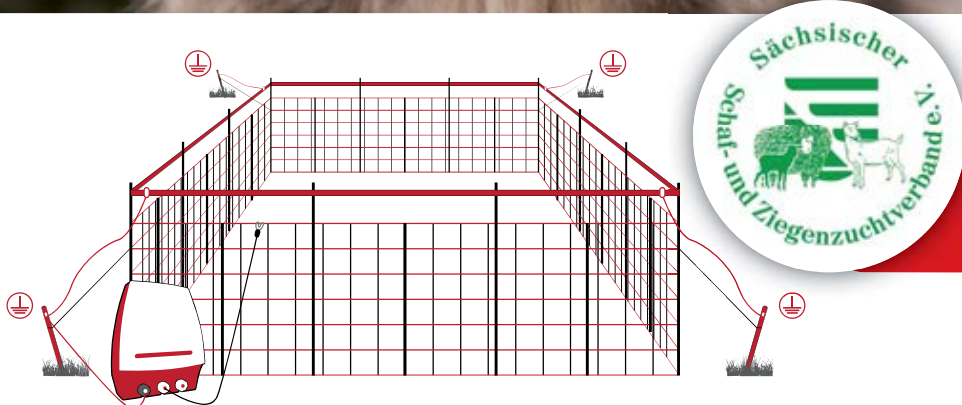


Part no.	Single prong	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
Rabbit- and cat-netting 15195	✓	50cm	25m	9	9	8	1
Rabbit- and cat-netting 15576-25	✓	50cm	25m	9	9	8	1
Rabbit- and cat-netting 15576	✓	50cm	50m	15	9	8	1
Rabbit- and cat-netting 14895	✓	65cm	50m	15	10	9	1
Rabbit- and cat-netting 15196	✓	75cm	25m	9	11	10	1
Rabbit- and cat-netting 15196-50	✓	75cm	50m	15	11	10	1





HIGHLIGHT 



Recommended by the Saxonie Sheep And Goat Breeding

More information: horizont.com/wolfdefence

The wolf is coming back and appears in more and more areas in Germany. The number of packs is exponentially increasing due to the high birth rate. Experience shows that the used standard sheep nettings are insufficient. Weak points are for example the low conduction current and the little optical deterrence for the wolf.

Already early horizont realised that it is important to develop new nettings to deter the wolves. In cooperation with the „Sächsische Schaf- und Ziegenzuchtverband e.V.“ a wolf defence system was developed between 2012 and 2013 which is unique until this day and demonstrably detain wolves from attacking farm animals.

The “horinetz super” is an easy and fast to assemble wolf netting and with a height of 90cm compact and simultaneously stable. It is been

hold with 90cm respectively 120cm 15mm–posts which were woven into the netting. The net is already secure against jumping over of the wolves because of an additional 20mm electrifiable tape at a height of 120cm. This 20mm tape irritates the wolves and he is not able to calculate the perfect jump. This additional expenditure for the shepherd is low and the amount of work for this extra wolf defence measures will not carry weight.

Parallel horizont takes part at research and development projects together with professional institutions and research establishments. The aim is to develop other special nettings for shepherds in regions which are difficult because of the geographical nature like extensive hilly landscape or the proximity to water.



International Wolf forum 2015 in Korbach



Gerald Becker as guestspeaker at „Herdenschutztag“ in OWL

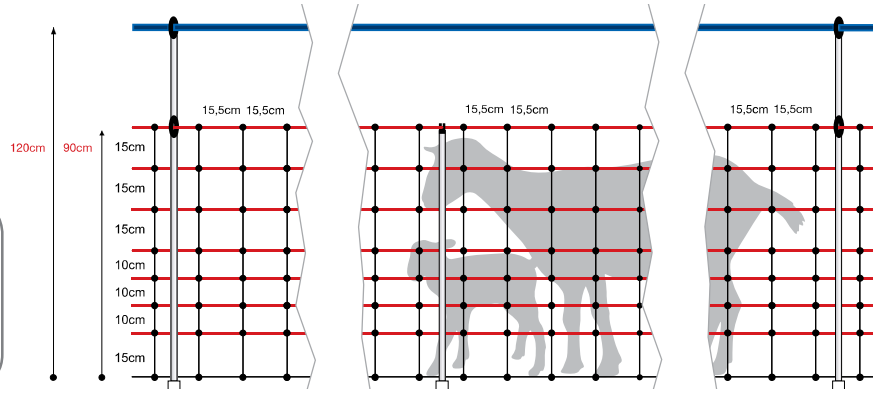
Wolf netting horinet super 90/120cm, 50m* and 145cm, 50m*

- Complete with 15 posts and connection kit
- Colour of posts: black
- Colour of wire: yellow (conducting) respectively black (not conducting)
- Knotting—points: yellow
- Monofilaments: 3 x 5 monofilaments à 0.40 mm, upper and bottom wire strengthened
- Colour of cap pieces: caps at the first post yellow, others black

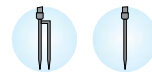
Wolf netting horinet super, 90/120cm, 50m*



Hint!
Use the tape only if you are sure wolfs are in your area!



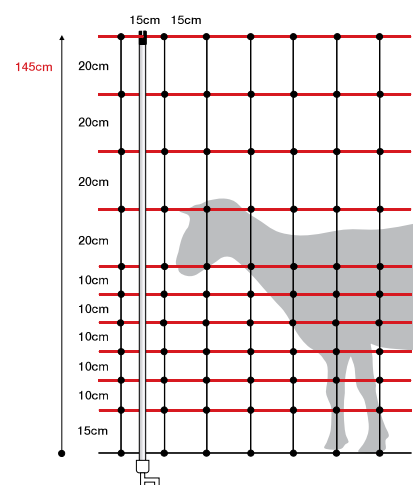
- Not contained in delivery:**
- 20mm tape (see p. 85 – 86),
 - Earth post for straining and earthing (see p. 66)
 - Tape connection cable (see p. 67)



- Low tension fall in netting
- High energy at the end of fence
- Better deterrent at the end of fence
- Quick setup and dismantling process
- Overvoltage protection because of earth tape
- For earthing we recommend 20mm tape
- Extra post 1.2m included in delivery, therefore perfect fitting

Part no.	Product	Ω / m	EAN	Piece
14925	Wolf netting with double prong 90/120cm, 50m	1.15	4 014803 149251	1
14992	Wolf netting with single prong 90/120cm, 50m	1.15	4 014803 149923	1

Wolf netting horinet super, 145cm, 50m*



Part no.	Product	Ω / m	EAN	Einheit
14967	Wolf netting 145cm, 50m	0,81	4 014803 149671	1
14993	Post 145cm with 2 clips		4 014803 149930	1

Part no.	Single prong	Double prong	Diameter	Height	Length	Number of posts	Horizontal polywires	of which are electrificable	Not conducting twines
14925		✓	15mm	90/120cm	50m	15+1	8	7	1
14992	✓		15mm	90/120cm	50m	15+1	8	7	1
14967		✓	19mm	145cm	50m	15	11	10	1

*Attention:
Never use nets without an energizer!



Repair kit for netting
»turbomax«

Part no.	EAN	Piece
15029-6	4 014803 420688	1



Plastic cap white for the first post of netting »turbomax«

Part no.	EAN	Piece
15030-3	4 014803 426703	1



Repair kit for netting
»horinetz«

Part no.	EAN	Piece
15029	4 014803 150295	1



Plastic cap yellow for the first post of netting »horinetz«

Part no.	EAN	Piece
15030-16	4 014803 435118	1

Repair kit for green netting



Part no.	EAN	Piece
15029-5	4 014803 4008749	1

Spare parts for electric netting



plastic cable, black

Part no.	EAN	Piece
15030-1	4 014803 150301	1



metal clip stainless steel

Part no.	EAN	Piece
15030-4	4 014803 435682	1



peg

Part no.	EAN	Piece
15030-5	4 014803 425102	1



plastic loop, black

Part no.	EAN	Piece
15030-2	4 014803 400235	1



metal clip stainless steel

Part no.	EAN	Piece
15030-40	4 014803 435682	1



warning sign for netting

Part no.	EAN	Piece
15030-6	4 014803 436856	1



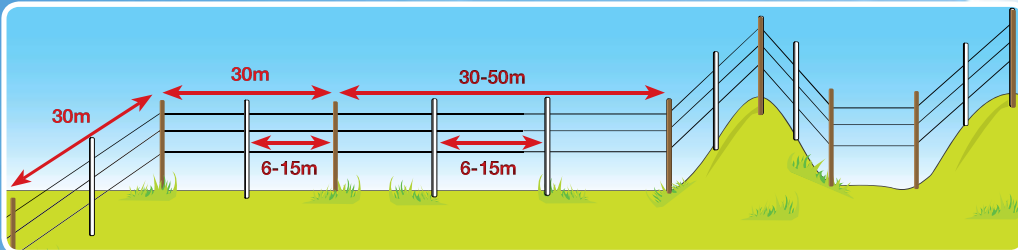
Find the video „easy post“ on our website
www.horizont.com

HIGHLIGHT



Hint!

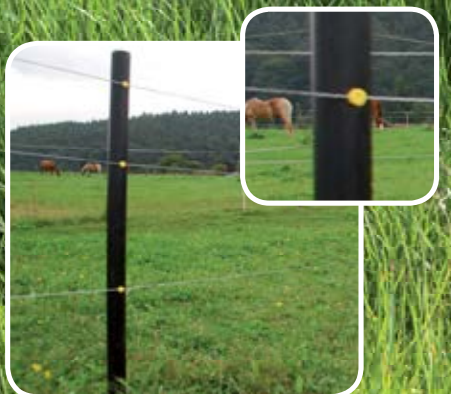
- The posts can be nailed, screwed, drilled and sawed by common woodworking tools
- Suitable to screw in all horizont insulators with wooden thread without drilling at all possible positions at the posts
- „horizont“ insulators to be nailed or screwed on to post can be fixed individually



- All-purpose posts as
I. not fixed spacer or
II. as fixed spacer with easy fix
- Made out of premium recycled material with a high amount of new plastic
- Recyclable after use
- UV-protected
- Easily possible to erect on stony or compacted soil
- Fast and simple installation for wire up to a diameter of 2.5mm

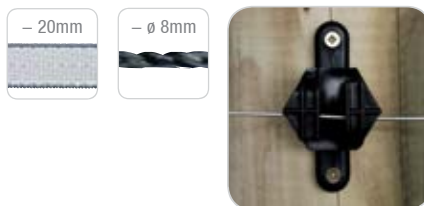
- Individual position of the holes possible by drilling new holes for the clips
- It's possible to work on the posts with common tools for wood. Useable are nails, screws, drills and saws for wood
- Suitable to screw in all horizont insulators with wooden thread without drilling at all possible positions at the posts
- Horizont insulators to be nailed or screwed on to post can be fixed individually on to the posts

Hint ! Use the post without the metal rod as a spacer.



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 \varnothing
- Insulator can be screwed in or nailed on
- The most powerful of its class



Part no.	EAN	Piece
15929-10	4 014803 408389	10
15929C	4 014803 405494	20
15929EI	4 014803 002938	45



Hint!

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



High tensile wire GALVADUR

- Special wire with a thick galvanized zinc / alu 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 \varnothing

Part no.	EAN	Piece
15945	4 014803 159458	1

GALVADUR 1.6, 315m (=5kg), 1.6mm \varnothing

Part no.	EAN	Piece
15904	4 014803 159045	1



1 Tension indicator spring

Balances temperature changes thus keeping the wire taut.

stainless steel

Part no.	EAN	Piece
15905	4 014803 159052	2

hot galvanized

Part no.	EAN	Piece
14150	4 014803 141507	2

narrow version

Part no.	EAN	Piece
14934	4 014803 149343	2



2 Permanent wire strainer

Serves to renew tension if wire slackens, with automatic lock. Can be inserted anywhere on the fence line

Part no.	EAN	Piece
15906	4 014803 159065	2

3 Shackle

Connects permanent wire strainer and tension indicator spring.

Part no.	EAN	Piece
15907C	4 014803 405487	5

Wire dispenser

- For unwinding galvanised wire from the coil

Part no.	EAN	Piece
15933	4 014803 159335	1



Wire connection screw

- With plastic coating

Part no.	EAN	Piece
14356	4 014803 143563	10



Wire joining clamp

- For a secure connecting of steel wires. To join two ends and create vertical connections

Part no.	EAN	Piece
15526C		10



Wire connection screw

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

Part no.	EAN	Piece
14197C		10



Griptide 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.	EAN	Piece
15960		10

For wire 1 – 2mm

Part no.	EAN	Piece
15967		20



Gripler tool

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

Part no.	EAN	Piece
15962		1



Wire strainer

- To securely strain high tensile wire. Easy to handle. Complete with lock

Part no.	EAN	Piece
15937-25		25

Part no.	EAN	Piece
15937C		2



Heavy duty corner knob ABS

Heavy duty corner knob ABS

Part no.	EAN	Piece
14061C		12



Heavy duty corner knob

Part no.	EAN	Piece
15070		10



Part no.	EAN	Piece
15070C		12

Heavy duty corner knob – made from porcelain

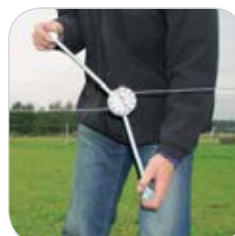
Part no.	EAN	Piece
15925		10



Straining tool

- For use with wire strainer 15937

Part no.	EAN	Piece
15936		1



a Insultube

• Low cost insulation of electrified wire on a wooden post, 25m / coil

black, 10m, 5mm ø

Part no.	EAN	Piece
15977	4 014803 159779	1

black, 25m, 5mm ø

Part no.	EAN	Piece
15935	4 014803 159359	1

b Insultube, white, for electrified rope up to 8mm ø

• Low cost insulation of electrified rope on a wooden post, 25m / coil

white, 25m, 5mm ø

Part no.	EAN	Piece
15935WS	4 014803 425911	1

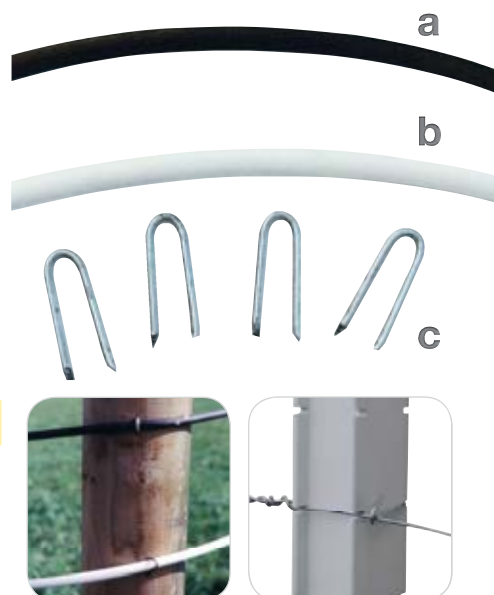
white, 25m, 5mm ø

Part no.	EAN	Piece
15951	4 014803 159519	1

c Special staple

• To fix / attach insultube onto a wooden post (for example with the fence pliers)

Part no.	EAN	Piece
15909	4 014803 159090	50



easy clip

• To fix GALVADUR wire (2.5 and 1.6mm) on to the easy posts

Part no.	EAN	Piece
14869	4 014803 148698	100



Fence pliers

An indispensable tool when setting up permanent fences. The allround farming tool when working with any type of wire.

Part no.	EAN	Piece
15653	4 014803 156532	1



Post rammer

• Suitable for wooden posts up to 15cm ø. Weight: 32 kg

Part no.	EAN	Piece
15934	4 014803 159342	1



Post hole borer

• Hand drill for making fence holes, 14cm ø

Part no.	EAN	Piece
15946	4 014803 159465	1



Corner / gate post*

• High pressure treated coniferous wood
Length 250cm, 14–16cm ø

Part no.	EAN	Piece
14131*	4 014803 141316	1

Length 200cm, 10–12cm ø

Part no.	EAN	Piece
14130*	4 014803 141309	1

Spacer*

• High pressure treated coniferous wood
Length 150cm, 4x4cm

Part no.	EAN	Piece
14132*	4 014803 141323	1

Recycled plastic fence posts*

- Recycled plastic fence posts are made of old plastic with unlimited durability
- After use they can get recycled again
- Insulators can be nailed-on, screwed-in, drilled or sawed
- All posts are pointed

grey, total length 200cm, 80mm ø
60cm in the ground, 140cm above ground

Part no.	EAN	Piece
15243*	4 014803 152435	1

grey, total length 175cm, 60mm ø
55cm in the ground, 120cm above ground

Part no.	EAN	Piece
15593*	4 014803 155931	1

grey, total length 150cm, 45mm ø
50cm in the ground, 100cm above ground

Part no.	EAN	Piece
15151*	4 014803 151513	1

easy post

Strong plastic post with a high isolation against the ground, also under wet conditions

total length 150cm, 53 mm ø

Part no.	EAN	Piece
14868*	4 014803 148681	1

total length 110cm, 53 mm ø

Part no.	EAN	Piece
14867	4 014803 148674	1

easy fix

total length 60cm, 16 mm ø

Part no.	EAN	Piece
14870	4 014803 148704	1

* Delivery terms: ex works. Please ask for your offer of freight costs.



14130 14132 15243 15593 15151 14870 14868 14867

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