

ELECTRIC FENCING CATALOGUE

Safety for your animal



Safety⁺

Stay on the safe side in the event of a power supply failure with the Safety⁺ function.

Page 17

Solar power

The new solar energiser farmer AS 180 with powerful integrated solar panel and space for rechargeable battery and earth stake.

Page 56

New & green

Rely on sustainability together with us: Discover the new Greenline products.

Page 8



Consultation

Do you have any questions about electric fences? Contact us. Our competent staff will be happy to advise you personally.



Repair Service

Our repair service is reliable, competent and fast. A defective energiser can be easily repaired by our team in Korbach, Germany. For the duration of the repair we will gladly provide a loaner energiser.



Social Media

Our social media channels enjoy a growing number of followers and are updated daily with news and tips.

 www.animalcare.horizont.com/facebookAC

 www.animalcare.horizont.com/youtubeAC

 www.animalcare.horizont.com/instagramAC



Website

Discover our website and find further articles, highlights, special offers, films, tips and much more. We look forward to seeing you!

www.animalcare.horizont.com



Newsletter


Our newsletter will always keep you up to date on discounts, special offers or current highlights. Register for free and stay tuned!


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CONTENTS

ENERGISERS & ACCESSORIES



9



12



60

01 Intro

- 4 | Service
- 5 | Notes on the catalogue
- 6 | About us
- 8 | Greenline
- 10 | Fence and netting heights
- 11 | Check list: Mobile electric fence

02 Energisers

- 14 | Guide
- 18 | Overview of product series
- 20 | Product guide
- 23 | Battery energisers 9 V (combination / dual)
- 31 | Battery energisers 12 V (combi / dual)
- 45 | Mains energisers 230 V
- 53 | Solar energisers
- 49 | Special equipment

03 Energy supply

- 62 | Guide
- 65 | Product guide
- 67 | Dry and block batteries
- 68 | 12 V batteries
- 69 | Accessories for 9 and 12 V batteries
- 70 | Chargers and power supply units
- 67 | Carrying and safety boxes
- 72 | Solar solutions
- 76 | Solar mounts



78



90



114

04 Earthing & control

- 80 | Guide
- 82 | Earth stakes
- 83 | Underground cable
- 83 | Warning signs
- 84 | Connecting cable
- 86 | Fence tester
- 88 | Lightning protection and fence switch
- 89 | FenceAlarm

05 Netting

- 92 | Guide
- 94 | Product guide
- 96 | Sheep and goat netting
- 102 | Wolf deterrent & Wolf deterrent netting
- 108 | Poultry netting
- 110 | Gate for electric fence netting
- 111 | Small animal netting
- 112 | Boundary nets and barrier fences
- 113 | Accessories | Replacement posts

06 Conductor material

- 116 | Guide
- 118 | Product guide
- 122 | Electric fence tape
- 124 | Electric fence rope
- 126 | Electric fence polywire
- 130 | Electric fence wire
- 132 | Electric fence connectors and tensioners
- 136 | Reels



138



158



182

07 Posts

- 140 | Guide
- 142 | Product guide
- 144 | Plastic posts
- 152 | Fibreglass posts
- 152 | Steel posts
- 156 | Recycling, wood posts and accessories
- 157 | T-posts and accessories

08 Insulators

- 160 | Guide
- 162 | Product guide
- 166 | Insulators for wood and recycled plastic posts
- 176 | Insulators for plastic and fibreglass posts
- 178 | Insulators for steel posts
- 180 | Insulators for T-posts

09 Gates

- 184 | Gate handles
- 186 | Gate handle insulators
- 187 | Gate handle insulators and gate handle sets
- 188 | Pasture gates

HORIZONT ENERGISERS WITH

SAFETY & SERVICE

+1

Warranty extension

Register online not later than 3 months after the date of purchase and secure an additional warranty extension free of charge!



Repair service

Good service is a key role at horizon. Whether in sales or in the in-house repair workshop - our experts at horizon are available to provide you with advice and practical support. In the unlikely event of a defect or damage to an energiser (e.g. due to lightning, moisture intrusion or similar), horizon's technical service is available at short notice. Many of the horizon specialist trade partners can repair your energiser on site thanks to the simple modular design, or your energiser will be repaired at the service centre in Korbach and you will receive a loaner energiser for the duration of the short repair time (usually 48 hours). During the subsequent safety check, all components of the energiser are tested and you receive a one-year warranty on the complete energiser!



Reliably tested

All horizon energisers undergo a 24-hour endurance test as minimum - safety you can rely on. Only added to the portfolio if all quality requirements are met. Tested according to applicable EU directives and safety standard EN 60335-2-76, built as per DIN EN ISO 9001.

Up to 5 years

warranty on horizon energisers!

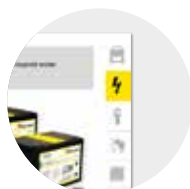
+1 YEAR
WARRANTY
and more!



+1 YEAR
WARRANTY



SIMPLE & CLEAR THROUGH

THE CATALOGUE***Quick index***

Quickly find the right spot: Navigate accurately through the product categories using the quick index.

***Guide***

Brilliant: Learn about important basic technical know-how offered by the guide at the beginning of each chapter.

***Product guides***

Everything at a glance: Survey the range and compare products in the product guides at the beginning of each chapter.

***Icons***

Simple explanation: Basic product features are highlighted with icons. This makes them quicker and easier to survey and compare.

CONTINUED ONLINE

IN THE HORIZONT SHOP

Simply enter the desired article number into the search box.

More about the product

You will find even more details, detailed views, videos and application images online.

Online flip catalogue - also available for download!

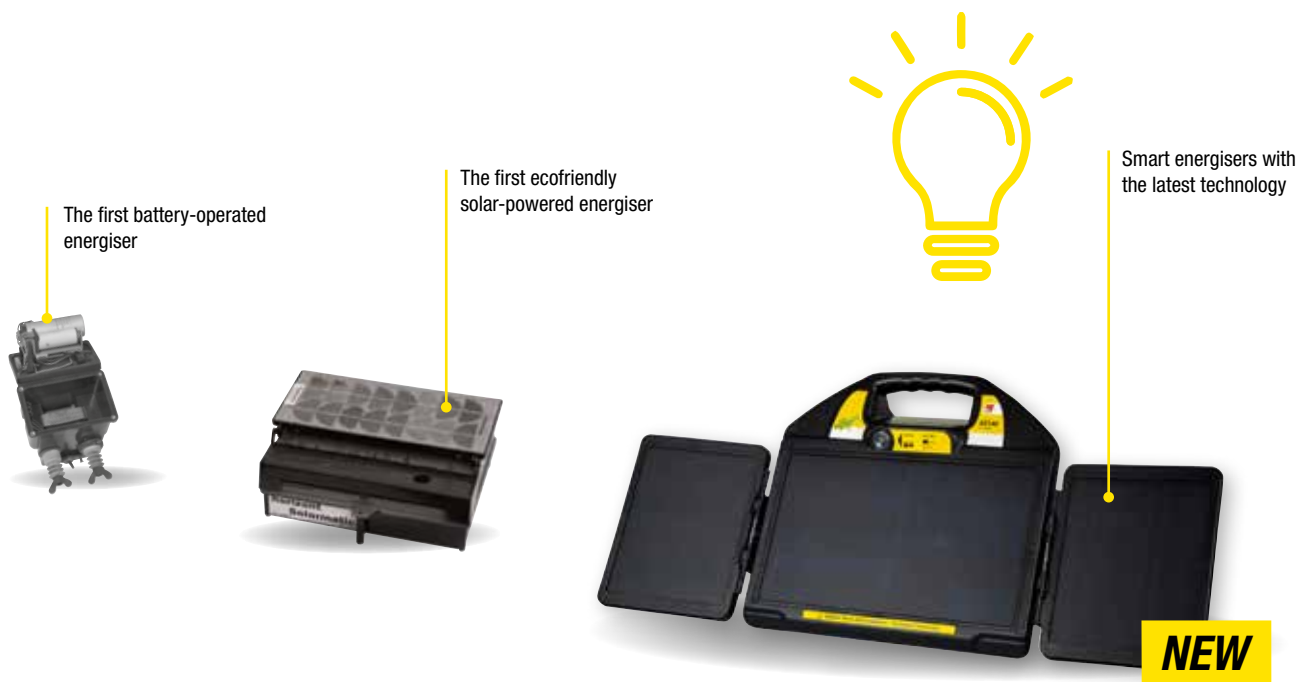
Discover our other catalogues and feel free to download them. All information is then at your fingertips.

www.animalcare.horizont.com/en

HORIZONT GROUP GMBH

A SUCCESS STORY

“The family-owned company horizont has existed for over 75 years and has developed from a one-man business into a Europe-wide group of companies. Social responsibility and responsible action have always been practised values at horizont.“



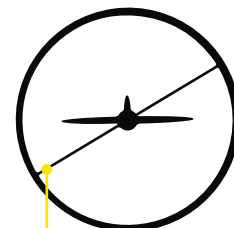
Innovations

The first battery-powered energiser was invented by horizont, laying the foundation for a new era in site-independent pasture management. horizont later developed the first ecofriendly, solar-powered energiser, launching a further technical innovation on the market.

Through consistent research and development of new technologies and applications, we have been continuously creating new products that set standards in their respective markets for over 75 years now. This is reflected in numerous patents, utility models and trademarks.

Finding a name

Familiar to every pilot: The artificial horizon in the aircraft cockpit. The development team of the current technical standard at that time also included the electrical engineer Dr. Heinz Müller. When Dr. Müller later sought a new field of activity and founded his own company in 1945, he called it "horizont" in memory of this invention.



Familiar to every pilot:
The artificial horizon.

Tradition

The success story of horizon began in 1945 as a one-man workshop. Livestock owners brought energisers for repair to Dr. Heinz Müller. He discovered that some of them were potentially life-threatening and used this as an opportunity to develop his own energisers - to the benefit of people and animals. Over the decades horizon has developed into one of the most important producers of electric fencing products worldwide and stands for numerous innovations and patents in this sector. Today, horizon has grown continuously as an owner-managed company - over three generations - and offers thousands of articles in the electric fence and animal husbandry sectors.

Today horizon is a corporate group with locations in several European countries and exports premium quality products to over 50 countries worldwide. horizon will continue to stand for the values "Tradition & Continuity", "Innovation & Quality" and "Service & Advice", making it a competent and reliable partner for livestock owners worldwide.



From generation to generation: from left to right: Company founded by electrical engineer Dr. Heinz Müller, Dipl. Ing. Robert Müller assumes management, Dipl.-Kfm. Steffen Müller now in the 3rd generation in senior management.

All-inclusive full-service package:

horizon electric fence energisers and accessories are developed according to the latest technical standards. Key production steps for the manufacture of electronic components and plastic parts take place in our production facilities in Germany.

horizont in numbers



1945
Establishment



> 500
Employees worldwide



8
Locations worldwide



~ 30
Trainees



> 40,000 sqm
Production and storage area

THE FUTURE IN OUR HANDS

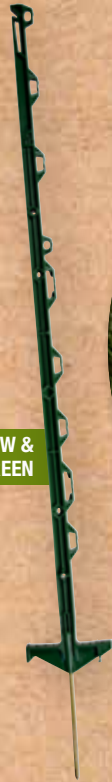


The first step towards sustainability and the first of many more steps in the future. At horizon, it is our duty to take action. Together we can evolve.

Sustainability is a matter close to our hearts. It is why we work with recycled materials to an increasing extent, drive innovation with circular products and do progressively more to reduce our carbon footprint. Our product and packaging design should be equal to this in every way. It was therefore time to make this more sustainable as well. Naturally, we also wanted to use this opportunity to incorporate our sense of aesthetics.

GREEN ALL AROUND

GREENLINE BY HORIZONT



NEW & GREEN

14698, P. 15



ABN30 GREEN
P. 15



NEW & GREEN

14668, P. 15



NEW & GREEN

14667, P. 15

The first energiser with housing made of bio-based plastic. Discover our other sustainable Greenline products.

The range with ecological, environmentally friendly troughs and feeders for poultry farming. Made of sugar cane and beets.



BIOPLASTICS



100% RECYCLABLE

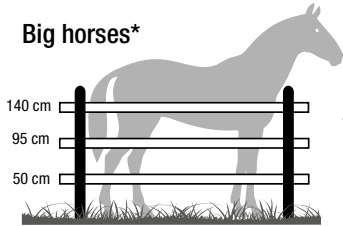


FENCE AND NETTING HEIGHTS

OUR RECOMMENDATION

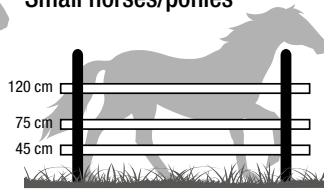
ANIMAL HUSBANDRY

Big horses*



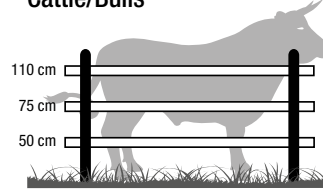
Fence height: 140 - 160 cm
 Conductor material: Tape
 Number of conductors: 3

Small horses/ponies



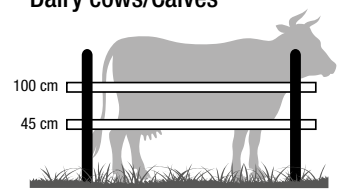
Fence height: 120 - 140 cm
 Conductor material: Tape
 Number of conductors: 3

Cattle/Bulls



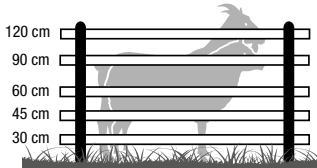
Fence height: 100 - 110 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 3

Dairy cows/Calves



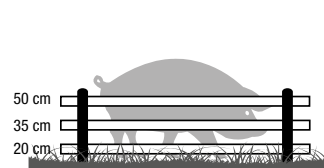
Fence height: 85 - 110 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 2

Sheep/Goats



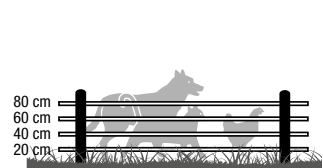
Fence height: 90 - 120 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 5

Pigs

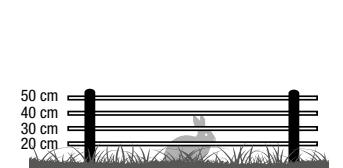


Fence height: 50 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 3

Cats/Dogs/Poultry/Rabbits

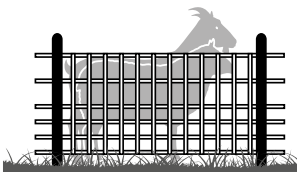


Fence height: 80 - 105 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 4



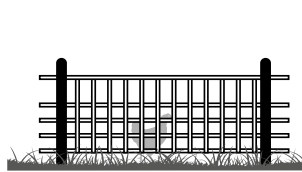
Fence height: 50 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 4

Sheep/Goats



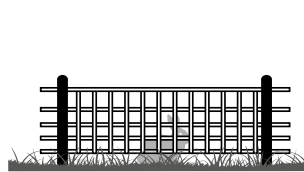
Net height: 90 - 45 cm

Poultry



Net height: 105 cm

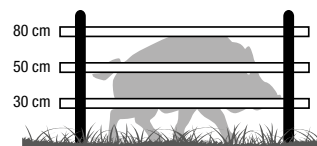
Hares/Rabbits



Net height: 50 - 75 cm

WILDLIFE DETERRENT

Wild boars



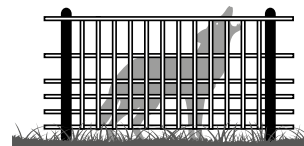
Fence height: 80 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 3

Deer



Fence height: 140 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 5

Wolves



Net height: 90 - 120 cm

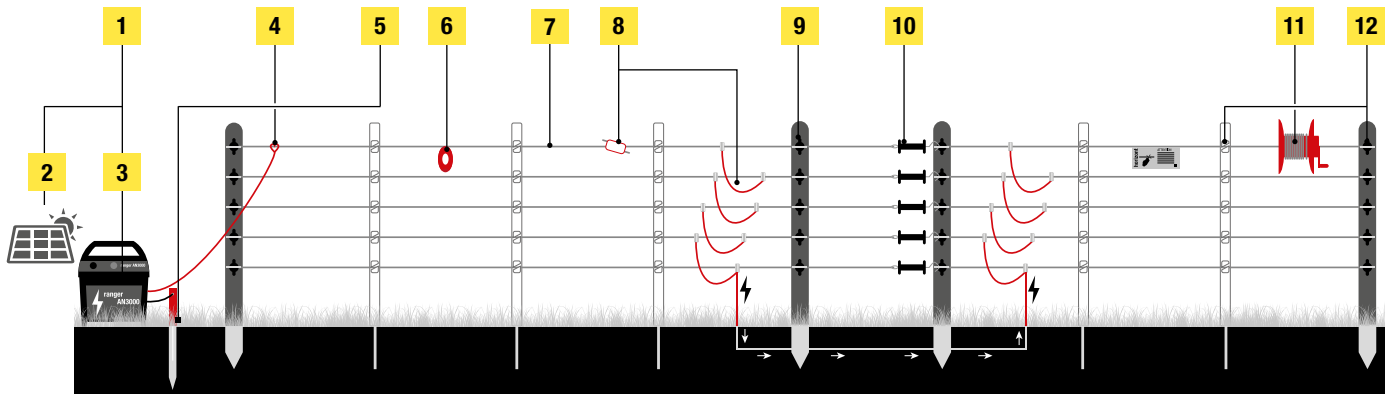
Wolves



Fence height: 90 - 120 cm
 Conductor material: Tape, rope, polywire, wire
 Number of conductors: 5

MOBILE ELECTRIC FENCE

CHECK LIST



WHICH EQUIPMENT IS NECESSARY FOR A PERMANENT OR MOBILE FENCE?

	What?	Why?
<input type="checkbox"/>	1 Energiser	The energiser transmits pulses to the fence. These pulses provide the deterrent to the animal at the electric fence.
<input type="checkbox"/>	2 Solar solutions	Use the energy of the sun for 9 V battery energisers and 12 V battery energisers. Save battery costs and tiresome recharging of the battery.
<input type="checkbox"/>	3 Energy supply	The right energy source for your energiser: 12 or 9 V batterie, mains, solar, or even a combination is possible.
<input type="checkbox"/>	4 Connection material lightning protection, switches	Makes the electrical connection from the energiser the fence. Lightning protection systems are a must for mains energisers.
<input type="checkbox"/>	5 Earthing	The energy flows from the ground through the earth stake and the connecting cable back into the energiser.
<input type="checkbox"/>	6 Control devices Fence accessories, warning signs	Control devices are necessary for informative fence inspection – they make it easier to check the legally required fence function test.
<input type="checkbox"/>	7 Conductor material Tapes, polywires, ropes, wires	Conducts the electrical pulse in the fence. The conductor is uninsulated and laid open to make good contact with the animal.
<input type="checkbox"/>	8 Connecting and tensioning	The conductor 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	The conductor material is well insulated and held in position. The right insulator should match the conductor material.
<input type="checkbox"/>	10 Gate handles and sets	A gate is normally used several times a day and should be easy to use.
<input type="checkbox"/>	11 Reels	A mobile fence or mobile sections can be set up and dismantled quickly and easily with a reel.
<input type="checkbox"/>	12 Posts	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.



02

Energisers

The heart of an electric fence system is the energiser. An energiser with the appropriate power will reliably supply the fence system with pulses, which ultimately provide the deterrent effect.

14 | Guide

18 | Overview of product series

20 | Product guide

23 | Battery energisers 9 V (combi / dual)

31 | Battery energisers 12 V (combi / dual)

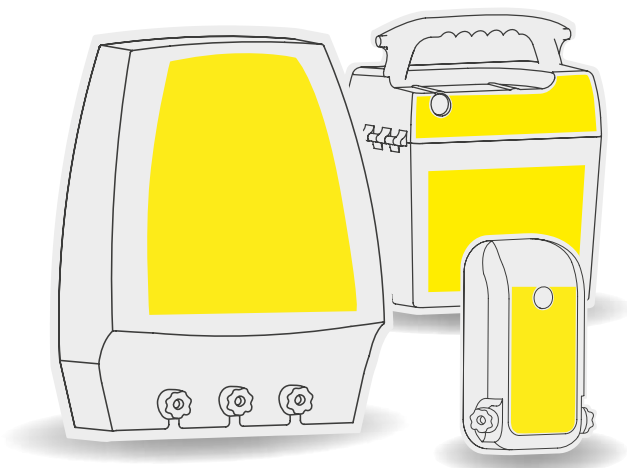
45 | Mains energisers 230 V

53 | Solar energisers

49 | Special equipment

FAQ

ENERGISERS



The horizon service for you:
All horizon energisers come with a two to five year warranty.

WHAT DOES THE ENERGISER DO?

- The energiser emits short current pulses that flow along the fence and remain unused if there is no animal contact or discharge.
- The pulse duration is only 0.1 to 0.3 thousandths of a second and the pulse spacing is between 1.15 and 2.0 seconds.

WHY A CLOSED CIRCUIT?

The circuit must be prepared so that it is closed when it comes into contact with the animal. It is also important to ensure that the current remains in the fence and really only activates when it is touched by an animal.

WHAT IS EARTHING?

- Earthing is the "counterpart to the freely installed conductor material" in the fence.
- The energy emitted by the energiser is fed back into the energiser through the ground and the earth stakes. When the fence is touched, the circuit is closed via the earthing.

TIP: EARTHING WITH DRY GROUND

Earthing: The number of earth stakes refers to damp soil. If the soil is dry in summer, the number may have to be increased.

WHAT HAPPENS WHEN THE ANIMAL TOUCHES THE FENCE?

- The animal closes the circuit. The pulse emitted by the electric fence energiser flows through the conductor material, the animal's body, the ground and the earth stakes 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.

WHAT HAVE JOULES & VOLTS GOT TO DO WITH IT?

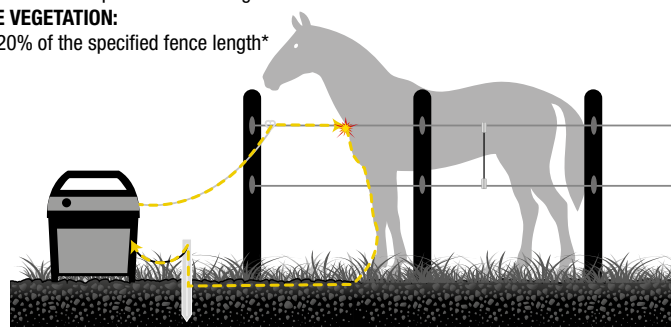
- Energy applied to the fence is expressed in joules. The higher the value, the stronger the electric shock. Joules hurt!
- The voltage of the fence is measured in volts. The voltage is needed to strike through the insulating hide of the animal. This is the only way the energy can jump over. Voltage is the carrier for what causes the pain!

WHY USE HIGH QUALITY CONDUCTOR MATERIAL?

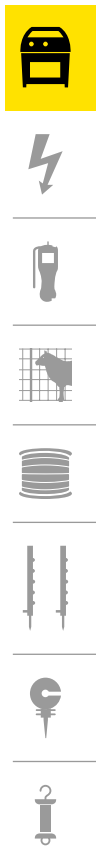
- The conductive material is the actual fence, i.e. tapes, ropes, polywires or wires.
- The conductor material transports the electricity and forms the barrier for the animals. The better the material, the higher the current that flows through the fence.
- Saving on conductor material is to be penny-wise and pound-foolish. Poor conductor material may cause significant energy loss and prevent electricity from reaching the end of the fence.
Never knot your conductor material! Too much energy is lost in the process. Always use suitable connectors to guarantee the current flow.

IS LONG GRASS AT THE FENCE A BAD THING?

- Yes, because grass or other vegetation diverts energy from the fence and the fence therefore loses energy.
- For vegetation, reduce the fence lengths as follows:
FOR AVERAGE VEGETATION:
To approx. 50 % of the specified fence length*
FOR DENSE VEGETATION:
To approx. 20% of the specified fence length*



*Data for single and multi-wire fences



HOW FAR APART SHOULD THE POSTS BE?

To ensure the conductor material is optimally fixed between the posts, the following distances have been proven to be effective:

- **POLYWIRES AND WIRES:**
6 m to 8 m (depending on net weight)
- **TAPES:**
3 m (for wide tape 40 mm), 5 m (for wide tape 20 mm), 6 m to 8 m (for wide tape 10 mm)
- **ELECTRIC ROPE:**
4 m (for diameter 6 - 8 mm), 6 m (for diameter 5 - 6 mm)
- **TERRAIN:**
Observe the local conditions! If the terrain is very uneven, several posts are required to guide the conductor material parallel to the ground.

WHAT ELSE NEEDS TO BE CONSIDERED?

- **Important:** Never operate fence systems and netting without an energiser!
- **Conductivity:** Be sure to use conductor material with high conductivity and good earthing, especially for high pulse energies.
- **Connectors:** Never knot your conductor material - always use suitable connectors to guarantee the current flow.
- **Warning signs:** For safety reasons, you are legally obliged to attach these to your electric fence, clearly visible and printed on both sides.
- **Circuit:** The fence does not have to be set up as a closed circuit - the circuit is closed by the animal contact.
- **Daily check with fence testers**

TIP

But one thing must not be forgotten: The energiser is useless if it is connected to a defective fence!

HOW DOES AN ENERGISER WORK?

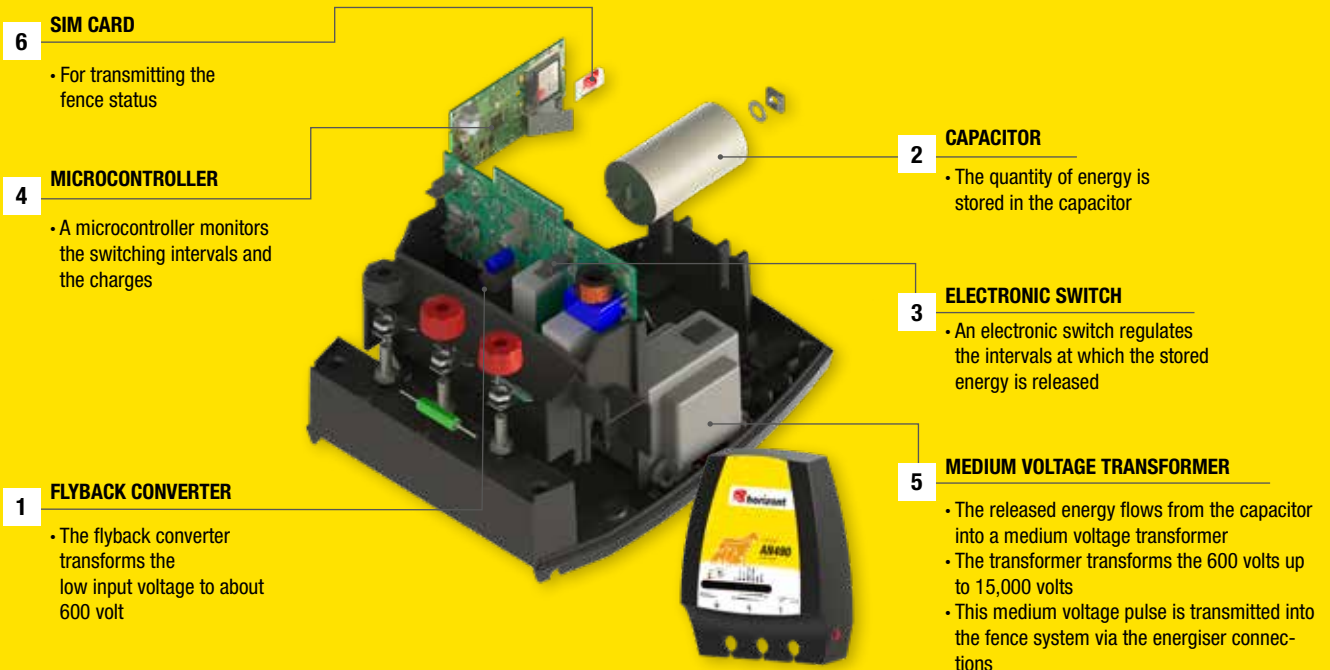
The energiser is supplied with power from the mains, a battery or a rechargeable battery (sometimes with solar support). When the energiser is earthed and connected to a fence, your circuit is not closed. If an animal now touches the fence, the electric circuit is closed by the animal: The current flows from the fence through the animal to the earth. To eliminate the risk of dangerous electric shock, the energiser sends the charge to the fence in pulses. A high voltage must be generated so that the current can flow over the animal on contact. The energy must also be "portioned" so that no dangerous current flows at the high voltage.

WHICH ADDITIONAL FUNCTIONS DO HORIZONT ENERGISERS OFFER?*

horizont energisers are equipped with various, sometimes automatic, functions. These guarantee simple and flexible adaptation to the respective type of use, fence quality and vegetation. Moreover, you can get by with fewer batteries throughout the entire electric fence season, as many energisers are equipped with a power economiser (ECO Power / power saving function).

The premium products are made of particularly stable and weather-resistant plastic. They are splash-proof protected, electrically well insulated and suitable for high operating temperatures in the sun. Some energisers have an LED display that provides information about the state of the fence despite being far away. The time spent on controlling is reduced to a minimum as the output voltage can be read directly on the energiser (Energy Control Power Control, Impulse Control, System Control).

There are also some features which ensure herding security in difficult situations in case of damage (2-stage CPN technology, turbomax technology).



*The range of functions differs between the different types of housing and energy supply

THE CHOICE OF THE RIGHT ENERGISER

WHICH ENERGY SUPPLY IS PREFERRED?

horizont distinguishes between battery energisers 9 V, rechargeable battery energisers 12 V, mains energisers 230 V and solar energisers. Many energisers also combine different types of power supply in order to offer more security and flexibility in the application. In addition, horizont offers different housing shapes, which are reflected in the operating mode. The main difference is in stationary housing forms for wall mounting and mobile housing forms for handy transport.



Battery energiser
9 V



Battery energiser
12 V



Mains energiser
230 V

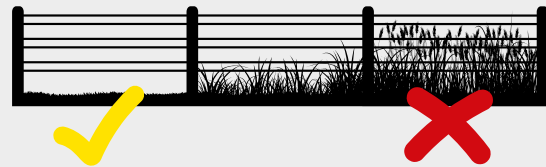


Solar energiser

HOW LARGE IS THE AREA TO BE FENCED?

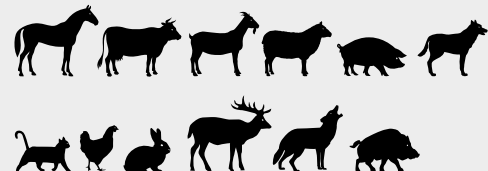
The fence length is important for the choice of the right energiser, but so is the conductor material. The power of the energiser and the conductivity of the conductor material must be compatible! To simplify the choice of suitable products for you, horizont has grouped together matching products in series.

Please note that the length specifications always assume optimal conditions, any disruptions and growth are excluded. With vegetation, for example, a partial amount of energy is diverted from the fence into the ground and is then missing from the herding performance.



WHICH ANIMALS ARE TO BE HERDED?

Each animal has special characteristics and reacts differently to the current pulse. The sensitivity and coat of the animals is important for the correct construction of the electric fence. Horizont has developed special pulse shapes for different situations to ensure herding security for every animal species and every fence situation. The animal symbols make it easy to identify the energiser recommended for a particular animal species.



WHICH ADDITIONAL FUNCTIONS DO HORIZONT ENERGISERS OFFER?

Each energiser has individual features and additional functions that are advantageous depending on the application. Some are found in the housing shape, others are technically incorporated. You will find these on the product pages under "Features" or discover more in our practical overview on 5.



SAFE HANDLING OF ENERGISERS: PROTECTION AGAINST FIRE, BLAZE, AND LIGHTNING

The energiser must not be installed inside buildings in operating areas with a fire hazard, such as barns, and should also be protected from mechanical damage and kept out of the reach of children. To prevent lightning damage, a specialist must install an earthed lightning protection energiser in the fence supply cable to the building or prior to entry into a building.

You will find detailed information in our safety instructions: www.animalcare.horizont.com/Secura

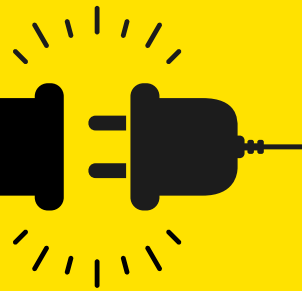
ENERGY SUPPLY CLEVERLY COMBINED

Electrified non-stop!

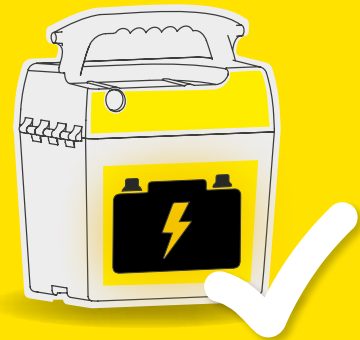
The horizont DUAL energisers with Safety⁺



Regular 230 V operation.



The power supply fails!



Automatic switch-over to 12 V battery operation.

DUAL

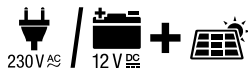


Can only be done by horizont energisers:

Automatic switch-over to battery operation in the event of an interruption in the power line.

Dual energisers are primarily operated via 12 volts or 9 volts. The energisers can also be connected to 230 V via a plug-in mains energiser. The 12 volt battery then serves as a backup battery and is charged via the plug-in power supply. If the 230 volt mains fails, the energisers continue to operate without interruption via the 9 or 12 V battery. The energisers can also be operated with a solar panel in conjunction with a 12 or a 9 volt battery.

COMBI



Combi energisers from the 12 V battery range can be operated on the 230 V mains or on the 12 V battery. Combi energisers from the battery range can be operated on the 12 volt battery or on a 9 volt battery. A solar panel can additionally be connected directly to the 12 V battery or to the 9 V battery via the energiser.

FROM HOBBY TO PROFESSIONAL

PRODUCT SERIES

The innovative series concept

The right product series for every application:

The horizon electric fence series covers all areas of application: From hobby to professional. The components of a series guarantee optimal interaction.

Beginning with the entry-level series trapper® to the premium series turbomax® horizon offers the optimal solution for every area of application, whether cattle, horse, sheep/goat husbandry or small animal keeping.

Nearly all energisers are produced in Germany and undergo a multi-stage quality assurance process during production, which is DIN EN ISO 9001 certified. This provides the greatest possible safety both in the use of individual components and for the finished product.

You will find the energiser features with explanations on the respective product in the catalogue.



Power & Extras

turbomax®

ranger®

hotshock®

farmer®

trapper®



farmer®

IDEAL FOR CALM GRAZING ANIMALS AND NORMAL OPERATING CONDITIONS

The farmer® range of energisers includes our all-rounders for electric fence management. They are ideal for calm grazing animals that are kept under normal operating conditions. This series also includes many energisers that have a dual function.

- Special pulse shape deploys gently in the fence system
- High output voltages offer great herding security

THE MOST IMPORTANT FEATURES*:

- Polycarbonate
- ON /OFF switch
- Energy Control (display of battery/rechargeable battery capacity)
- ECO Power (power economiser)
- Very sturdy housing
- Power Control (pulse control)



trapper®

IDEAL FOR SMALL, SIMPLE FENCE SYSTEMS

Our trapper® series is very suitable for newcomers and hobby livestock owners. The trapper energisers are the ideal choice for small and simple fence systems.

- Simple to use, easy to install
- Compact housing, versatile in use
- Output energy designed for the most common applications, e.g. horse keeping

THE MOST IMPORTANT FEATURES*:

- ON /OFF switch
- Energy Control (display of battery/rechargeable battery capacity)
- Very sturdy housing
- Power Control (pulse control)



*The range of functions differs between the different types of housing and energy supply.



hotshock®

IDEAL FOR ROBUST ANIMALS AND FOR WILDLIFE DETERRENT

This series is perfectly suited for deterring robust animals or the keeping of long-haired and feathered animals. hotshock® energisers can therefore be used for sheep and goat farming in combination with netting. They regulate every difficult situation, making them useful as special solutions in wildlife deterrent.

- Strong energisers with maximum output energy
- Special pulse shape enables special herding security under the most difficult conditions

THE MOST IMPORTANT FEATURES*:

- Polycarbonate
- ON /OFF switch
- Energy Control (display of battery/rechargeable battery capacity)
- ECO Power (power economiser)
- Impulse Control (cycle sequence monitoring)
- Very sturdy housing
- 2 fence terminals
- Power Control (pulse control)



ranger®

FOR EXACTING DEMANDS AND DRY SOIL CONDITIONS

Our professional series for exacting demands and dry location conditions. The ranger® energisers are ideal for grazing animals such as cattle or horses. This series also includes many energisers that have a dual function.

- Energiser function can be adapted to fence conditions depending on the situation
- Special pulse shape deploys gently in the fence system
- Large herding performance even during dry summer periods

THE MOST IMPORTANT FEATURES*:

- Polycarbonate
- ON /OFF switch
- System Control (argutector fence control)
- Energy Control (display of battery/rechargeable battery capacity)
- ECO Power (power economiser)
- 6-stage voltage display
- Impulse Control (cycle sequence monitoring)
- Very sturdy housing
- Voltage regulator (rotary potentiometer)
- 2 fence terminals
- 6 modes function



turbomax®

POWERFUL PERFORMANCE FOR HIGHEST DEMANDS

Our premium series for extreme and particularly high demands. The turbomax® energisers are extremely powerful energisers and are suitable for extremely long fences. turbomax energisers can be used for herding almost all types of animals.

- Important safety features and functions that are very useful for the user
- Special safety circuit, which increases the performance when required

THE MOST IMPORTANT FEATURES*:

- Polycarbonate
- ON /OFF switch
- System Control (argutector fence control)
- Energy Control (display of battery/rechargeable battery capacity)
- ECO Power (power economiser)
- 6-stage voltage display
- LED display
- Alarm function
- 2-stage CPN technology
- Impulse Control (cycle sequence monitoring)
- Very sturdy housing
- turbomax technology



PRODUCT GUIDE

ENERGISERS















9V DC BATTERY ENERGISERS 9 V

DUAL / COMBI	Number of possible nets per 50 m	As per CEE* <small>CEE (1500V)</small>	Without vegetation <small>max.</small>	Average vegetation <small>max.</small>	High vegetation <small>max.</small>	Animal husbandry								Wildlife deterrent		Product		
															Designation	Art. No.	Page	
Dual	2	9.5 km	5.5 km	3.8 km	0.9 km	•	•			•						ABN30 GREEN	10862	25
Combi	—	3 km	1.5 km	—	0.5	•				•						trapper® AB12	14497	26
Combi	—	4 km	3 km	1 km	0.3 km	•	•		•	•						trapper® B12	10616	28
Combi	—	8 km	5 km	3.5 km	0.8 km	•	•		•	•						trapper® B22	10620	28
Dual	2	9.5 km	5.5 km	3.8 km	0.9 km	•	•			•						farmer® ABN30	10891	29
Dual	3	10 km	6 km	4 km	1.1 km	•	•	•					•			hotshock® ABN37	10892	30
Dual	2	12 km	6.5 km	4.5 km	1.3 km	•	•			•						ranger® ABN60	10983	31

12V DC BATTERY ENERGISERS 12 V

Combi	3	8 km	4 km	2 km	0.8 km	•	•	•	•	•	•					trapper® AN45	10867	34
Combi	4	12 km	8 km	3.5 km	1.2 km	•	•	•	•	•	•					trapper® AN80	10866	34
Combi	6	18 km	12 km	4.5 km	1.5 km	•	•	•	•		•	•				trapper® AN120	10865	34
Dual	6	30 km	10 km	3.5 km	1.2 km	•	•	•	•	•			•			farmer® AN100	10896	36
Dual	12	80 km	18 km	4.8 km	1.9 km	•	•	•	•				•			farmer® AN300	10882	36
Dual	6	40 km	10 km	3.5 km	1.2 km	•	•	•	•				•			farmer® AN1000	10855	38
Dual	6	40 km	10 km	3.5 km	1.2 km	•	•	•	•				•			farmer® AN1000Solar	10856	38
—	14	80 km	30 km	15 km	8 km	•	•	•					•	•		hotshock® A300	10613	39
Combi	14	130 km	45 km	20 km	10 km	•	•	•					•	•		hotshock® AN490	10813	40
Dual	12	90 km	43 km	17 km	9 km	•	•	•	•				•	•		ranger® AN360	10997	42
Dual	14	130 km	60 km	20 km	10 km	•	•	•	•				•	•		ranger® AN490	10857	42
Dual	10	50 km	20 km	4.5 km	1.7 km	•	•	•					•			ranger® AN2000	10854	44
Dual	12	100 km	33 km	5 km	2 km	•	•	•	•				•	•		ranger® AN3000	10992	44
Dual	14	130 km	60 km	20 km	10 km	•	•	•	•				•	•		ranger® AN4800	10993	44
Dual	17	180 km	55 km	21 km	14 km	•	•	•					•	•		turbomax® AN800	10749	45

MAINS ENERGISERS 230 V

DUAL / COMBI	Number of possible nets per 50 m	As per CEE* 	Without vegetation 	Average vegetation 	High vegetation 	Animal husbandry								Wildlife deterrent		Product		
																Designation	Art. No.	Page
—	3	15 km	4 km	2 km	0.8 km	•	•		•	•	•	•			trapper® N45	10864	47	
—	10	50 km	15 km	4 km	1.4 km	•	•		•	•			•		farmer® N200	10996	48	
—	16	120 km	45 km	20 km	10 km	•	•	•					•	•	hotshock® N500	10614	49	
—	12	60 km	20 km	5 km	2 km	•	•		•	•			•		ranger® N270	10608	52	
—	16	100 km	40 km	10 km	4 km	•	•		•	•			•		ranger® N420	10742	52	
—	30	320 km	85 km	40 km	25 km	•	•	•		•			•		turbomax® N1430	10748	53	

SOLAR ENERGISERS

—	—	8.5 km	5 km	3 km	0.9 km	•	•			•					trapper® AS25	14982	55
—	—	18.5 km	5 km	3 km	0.9 km	•	•			•					farmer® AS50	14485	56
—	8	48 km	14 km	5 km	1.5 km	•	•				•		•		farmer® AS180	10919	56
Dual	6	43 km	12 km	4 km	1.4 km	•	•						•		ranger® AS120	10986	60
Dual	8	48 km	14 km	4.3 km	1.6 km	•	•						•	•	ranger® AS180	10987	60

DID YOU KNOW?

Each horizon electric fence battery is fitted with connecting cables - no additional accessories are required for connection to the energiser.





Battery energisers 9 V

Battery energisers are small and handy. This makes them particularly suitable for mobile use. They can be operated with a 9 volt battery or with a 12 volt lead-fleece battery. All battery energisers can also be expanded to solar operation with a solar panel.

The dual energisers can also be connected to the 230 volt mains. The battery energisers offer many possible uses. The maximum output energy of the battery energisers is limited by the performance of the batteries. The use of a lead-fleece battery allows greater energies to be realised.

But beware: 9 V Batteries cannot be recharged. Once they are completely discharged, they must be disposed of properly.

Each horizont electric fence battery can be stored for up to two years without any significant loss of capacity.

There are two different battery versions: Alkaline batteries (air cells) and zinc-carbon batteries. Both versions are mercury- and cadmium-free and therefore environmentally friendly. Further information on the two battery versions at Page 62.

ABN30GREEN battery energiser 9 V



GREENLINE

made by horizont



Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

ECO Power - power economiser:

- Power consumption is automatically adjusted to the fence condition
- less energy consumption = less environmental impact and lower costs

Extremely robust housing

- Sustainable housing of bio-based PP
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds rechargeable batteries with a capacity up to 27 Ah and batteries up to 200 Ah

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Rear view




Earth terminal

Fence terminal

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



Max. fence length	Netting:	2 x 50 m
	As per CEE:	9.5 km
	Without vegetation:	5.5 km
	Average vegetation:	3.8 km
	High vegetation:	0.9 km

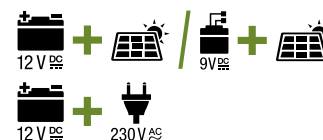
Animal husbandry:



Input:	• 0.4 J
Max. output:	• 0.3 J
Energy consumption:	• 9 V: 28 - 36 mA
	• 12 V: 24 - 28 mA
Max. voltage:	• 10,000 V
Voltage 500 Ω:	• 3,200 V
Dimensions (L x W x H):	• 17.5 x 24.8 x 31.9 cm
Scope of delivery:	• Energiser, earth stake, fence and earth connecting cable, 230 V power supply unit

Art. No.	Unit	EAN
10862	 1	 4 014803 467492

Energy supply:



Recommended accessories:

- 12 V lead-fleece battery, 34 Ah (14501) ≥ service life: 50- 59 days* or 9 V alkaline battery with 150 Ah (14057E) ≥ service life: 173-223 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 5 W (14499)

DUAL

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure.

trapper® AB Battery energiser 9 V



Holding device for solar panel



Handy housing

- Particularly impact-resistant housing through use of high-quality plastics (ABS)
- Material is UV resistant, splash-proof and oil-resistant

ON/OFF switch, Power Control & pushbutton for menu navigation

- Shows the activity of the energiser
- Flashes in time with the pulse output
- Two modes of operation:
 1. Slow pulse sequence
 2. Normal pulse sequence

Bottom view



Earth terminal

Fence terminal

Solar connection

12 V rechargeable battery connection

Spiked post

- For secure stability
- With tread surface

Energy supply



Features

- Automatic switch-over to solar operation
- Microprocessor control



The energiser can be hooked into the fence material



Suspension device for wall mounting and integrated carrying handle

COMBI

trapper® AB12



Max. fence length:



As per CEE:	3 km
Without vegetation:	1.5 km
High vegetation:	0.5 km

Animal husbandry:



- Input:** • 0.18 J
- Max. output:** • 0.12 J

- Energy consumption:** • 6 V: 17 / 25 mA
- 12 V: 8 / 11 mA

- Max. voltage:** • 11,000 V
- Voltage 500 Ω:** • 2,000 V

- Dimensions (L x W x H):** • 13.1 x 11.1 x 23.9 cm

- Scope of delivery:** • Energiser, earth stake and spiked post, fence and earth connecting cable

Art. No.	Unit	EAN
14497	1	4 014803 144973

Recommended accessories:

- 12 V lead-fleece battery with 12 Ah (15842) ≥ service life: 45/62 days* or 6 V block battery with 50 Ah (230502E) ≥ service life: 83/122 days*
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 2.5 W (14541C)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Optionally 12 V lead-fleece battery with 12 Ah (15842), 6 V block battery with 50 Ah (230502E) or solar panel 2.5 W (14541C)

trapper® B Battery energiser 9 V



Integrated carrying handle

- Easy to move with one hand



Cable bushing

- Intelligent cable routing from inside the energiser to solar panel

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant

Energy supply

Possibilities of energy supply for these energisers:



Features

- Very sturdy housing
- Power Control (pulse control)
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Secure closing mechanism – pull energiser apart and remove cover



Housing serves as portable box and protects rechargeable battery / battery from effects of weather

Front view



ON/OFF switch & Power Control

- Shows the activity of the energiser
- Flashes in time with the pulse output

Rear view



Fence terminal

Earth terminal



trapper® B Battery energiser 9 V

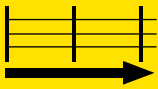
COMBI

trapper® B12

trapper® B22



Max. fence length:



As per CEE: 4 km
 Without vegetation: 3 km
 Average vegetation: 1 km
 High vegetation: 0.3 km

As per CEE: 8 km
 Without vegetation: 5 km
 Average vegetation: 3.5 km
 High vegetation: 0.8 km

Type of animal husbandry:



Input:

• 0.18 J

Max. output:

• 0.12 J

Energy consumption:

• 9 V: 15 mA

• 12 V: 22 mA

Max. voltage:

• 8,500 V

Voltage 500 Ω:

• 1,500 V

Dimensions (L x W x H):

• 19.5 x 23.3 x 25.0 cm

Scope of delivery:

• Energiser, earth stake (approx. 30 cm), fence and earth connecting cable

• 0.3 J

• 0.22 J

• 9 V: 35 mA

• 12 V: 25 mA

• 9,000 V

• 2,200 V

• 19.5 x 23.3 x 25.0 cm

• Energiser, earth stake (approx. 30 cm), fence and earth connecting cable

Art. No. Unit EAN
10616 1 4 014803 106162

Art. No. Unit EAN
10620 1 4 014803 006851

Recommended accessories:

- 12 V lead-fleece battery with 12 Ah (15842) ≥ service life: 41 days* or 9 V alkaline battery with 120 Ah (15844E) ≥ service life: 333 days*
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 2 W (60140)

- 12 V lead-fleece battery with 12 Ah (15842) ≥ service life: 20 days* or 9 V alkaline battery with 120 Ah (15844E) ≥ service life: 143 days*
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 2 W (60140)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V lead-fleece battery with 12 Ah (15842)



9 V alkaline battery with 120 Ah (15844E)



Solar panel 2 W (60140)

farmer® ABN

Battery energiser 9 V



Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

Holding device for solar panel

- Easy attachment of the solar panel to the holding device
- 4 different setting angles and a transport position of the solar panel possible



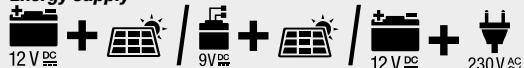
Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds rechargeable batteries with a capacity up to 34 Ah and batteries up to 200 Ah

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

- Plug-in profile for earthing rod in housing
- Top and bottom part are connected by hinge
- Housing can be secured by padlock
- Retaining plate inside provides firm stability for 9 and 12 V batteries
- Multi-optional storage compartment for power supply unit when not in use
- Intelligent cable routing prevents pinched cables and runs from inside the energiser to the solar panel
- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001

Advantage:

2 in 1



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

DUAL

farmer® ABN30



Max. fence length:	Netting:	2 x 50 m
	As per CEE:	9.5 km
	Without vegetation:	5.5 km
	Average vegetation:	3.8 km
	High vegetation:	0.9 km

Animal husbandry:



- Input:** · 0.4 J
- Max. output:** · 0.3 J
- Energy consumption:** · 9 V: 28 - 36 mA
- 12 V: 24 - 28 mA
- Max. voltage:** · 10,000 V
- Voltage 500 Ω:** · 3,200 V
- Dimensions (L x W x H):** · 17.5 x 24.8 x 31.9 cm
- Scope of delivery:** · Energiser, earth stake (double spike approx. 17 cm), fence and earth connecting cable

Art. No.	Unit	EAN
10891	1	4 014803 108913

Recommended accessories:

- 12 V lead-fleece battery with 34 Ah (14501) ≥ service life: 50-59 days* or 9 V alkaline battery with 150 Ah (14057E) ≥ service life: 173-223 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 5 W (14499)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V lead-fleece with 34 Ah (14501) and solar panel 5 W (14499)

hotshock® ABN Battery energiser 9 V



Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

Holding device for solar panel

- Easy attachment of the solar panel to the holding device
- 4 different setting angles and a transport position of the solar panel possible



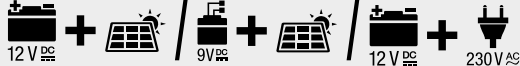
Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds rechargeable batteries with a capacity up to 34 Ah and batteries up to 200 Ah

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

- Plug-in profile for earthing rod in housing
- Top and bottom part are connected by hinge
- Housing can be secured by padlock
- Retaining plate inside provides firm stability for 9 and 12 V batteries
- Multi-optional storage compartment for power supply unit when not in use
- Intelligent cable routing prevents pinched cables and runs from inside the energiser to the solar panel
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN 60335-2-76 and DIN EN ISO 9001

Advantage:
2 in 1



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

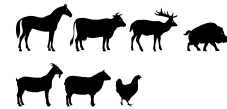
DUAL

hotshock® ABN37



Max. fence length:	Netting:	3 x 50 m
	As per CEE:	10 km
	Without vegetation:	6 km
	Average vegetation:	4 km
	High vegetation:	1.1 km

Animal husbandry:



- Input:** · 0.5 J
- Max. output:** · 0.37 J
- Energy consumption:** · 9 V: 47 mA
- 12 V: 35 mA
- Max. voltage:** · 13,000 V
- Voltage 500 Ω:** · 3,800 V
- Dimensions (L x W x H):** · 17.5 x 24.8 x 31.9 cm
- Scope of delivery:** · Energiser, earth stake (double tip approx. 17 cm), fence connection cable

Art. No.	Unit	EAN
10892	1	4 014803 108920

Recommended accessories:

- 12 V lead-fleece battery with 34 Ah (14501) ≥ service life: 40 days* or 9 V alkaline battery with 170 Ah (12012E) ≥ service life: 150 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 10 W (14511)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V lead-fleece with 34 Ah (14501) and solar panel 10 W (14511)

ranger® ABN Battery energiser 9 V



Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

Holding device for solar panel

- Easy attachment of the solar panel to the holding device
- 4 different setting angles and a transport position of the solar panel possible

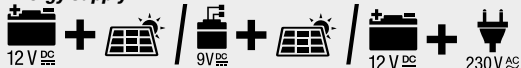
Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds rechargeable batteries with a capacity up to 34 Ah and batteries up to 200 Ah

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

- Plug-in profile for earthing rod in housing
- Top and bottom part are connected by hinge
- Exhaustive discharge cut-off at 12 V
- Housing can be secured by padlock
- Retaining plate inside provides firm stability for 9 and 12 V batteries
- Multi-optional storage compartment for power supply unit when not in use
- Intelligent cable routing prevents pinched cables and runs from inside the energiser to the solar panel
- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

DUAL

ranger® ABN60



Max. fence length:	Netting:	2 x 50 m
	As per CEE:	12 km
	Without vegetation:	6.5 km
	Average vegetation:	4.5 km
	High vegetation:	1.3 km



- Input:** · 0.65 J
- Max. output:** · 0.6 J
- Energy consumption:** · 9 V: 19 - 57 mA
- 12 V: 22 - 70 mA

- Max. voltage:** · 11,000 V
- Voltage 500 Ω:** · 3,600 V
- Dimensions (L x W x H):** · 17.5 x 24.8 x 31.9 cm

- Scope of delivery:** · Energiser, earth stake (double spike approx. 17 cm), fence and earth connecting cable

Art. No.	Unit	EAN
10983	1	4 014803 461001

Recommended accessories:

- 12 V lead-fleece battery with 34 Ah (14501) ≥ service life: 20-64 days* or 9 V alkaline battery with 170 Ah (12012E) ≥ service life: 173-223 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 10 W (14511)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V lead-fleece battery with 34 Ah (14501), 9 V alkaline battery with 170 Ah (12012E) and solar panel 10 W (14511)

TIP

Charge your special or lead-fleece battery only with regulated chargers to guarantee a long service life and make sure that the battery is well ventilated.



Battery energisers 12 V

Large fence systems can be operated using battery energisers. High-capacity batteries can be used to extract so much energy that the turbomax® AN800, for example, can deliver a powerful 8 joules of output energy to the fence.

All batteries can be connected to a solar panel to avoid recharging from the mains if there is sufficient sunlight.

Energisers that can accommodate a battery in the housing also have a solar regulator installed in the energiser. The advantage of this housing shape is that the energiser, battery and solar panel form a compact unit.

trapper®  **Battery energisers 12 V**



Power Control

- Shows the activity of the energiser
- Flashes in time with the pulse output

Hanging device for wall mounting



Input socket

- For connection to 12 V or 230 V

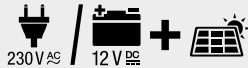
Earth terminal

Fence terminal

Handy housing

- Particularly impact-resistant housing through use of high-quality ABS plastics (PC and PP)
- Material is UV resistant, splash-proof and oil-resistant

Energy supply



Combi energisers

Advantage: 2 in 1! Combi energisers can be operated either on 230 V mains power or on a 12 V battery.

Features

- Very sturdy housing
- Power Control (pulse control)
- Automatic switch-over to solar operation
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



Battery energisers 12 V

COMBI

trapper® AN45

trapper® AN80

trapper® AN120



Max. fence length:



Netting: 3 x 50 m
 As per CEE: 8 km
 Without vegetation: 4 km
 Average vegetation: 2 km
 High vegetation: 0.8 km

Netting: 4 x 50 m
 As per CEE: 12 km
 Without vegetation: 8 km
 Average vegetation: 3.5 km
 High vegetation: 1.2 km

Netting: 6 x 50 m
 As per CEE: 18 km
 Without vegetation: 12 km
 Average vegetation: 4.5 km
 High vegetation: 1.5 km

Animal husbandry:



Input:

Max. output:

Energy consumption:

Max. voltage:

Voltage 500 Ω:

Dimensions (L x W x H):

Scope of delivery:

- 0.8 J
- 0.45 J
- 50 mA
- 7,900 V
- 3,300 V
- 5.8 x 12.4 x 17.2 cm
- Energiser, power supply unit, fence, earth and battery connecting cable

- 1.2 J
- 0.8 J
- 90 mA
- 8,400 V
- 3,600 V
- 5.8 x 12.4 x 17.2 cm
- Energiser, fence, earth and battery connecting cable

- 2.4 J
- 1.2 J
- 145 mA
- 8,600 V
- 4,000 V
- 5.8 x 12.4 x 17.2 cm
- Energiser, power supply unit, fence, earth and battery connecting cable

Art. No. Unit EAN
10867 1 4 014803 108678

Art. No. Unit EAN
10866 1 4 014803 108661

Art. No. Unit EAN
10865 1 4 014803 108654

Recommended accessories:

- 12 V AGM battery with 60 Ah (14548) ≥ service life: 52 days*
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 10 W (14545)

- 12 V AGM battery with 60 Ah (14548) ≥ service life: 40 days*
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 10 W (14545) or 1 x 20 W (14536)

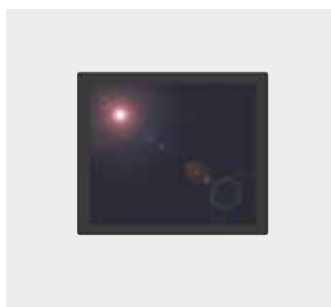
- 12 V battery special with 100 Ah (14126) ≥ service life: 29 days*
- Earth stake 2 x 1 m (14041-1)
- Solar panel 1 x 20 W (14536) or 1 x 20 W (14536)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V AGM battery with 60 Ah (14548)



Solar panel 10 W (14545)



Solar panel 20 W (14536)

farmer®  Battery energisers 12 V



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant

Energy Control

- 3-stage LED control display for capacity and function of rechargeable battery
- Shows the activity of the energiser
- Flashes in time with the pulse output

Fence terminal

Earth terminal

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

- ECO Power / power saving circuit: The power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



Ventilation slots to allow discharge of condensation water



Connection socket for the power supply unit at the back

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



DUAL

farmer® AN100

farmer® AN300



Max. fence length:

Netting:	6 x 50 m
As per CEE:	30 km
Without vegetation:	10 km
Average vegetation:	3.5 km
High vegetation:	1.2 km

Netting:	12 x 50 m
As per CEE:	80 km
Without vegetation:	18 km
Average vegetation:	4.8 km
High vegetation:	1.9 km

Animal husbandry:



Input:

Max. output:

Energy consumption:

Max. voltage:

Voltage 500 Ω:

Dimensions (L x W x H):

Scope of delivery:

- 1.3 J
- 1 J
- 30 - 90 mA
- 11,500 V
- 4,200 V
- 9.0 x 19.0 x 23.3 cm
- Energiser, power supply unit, fence and earth connecting cable

- 4.2 J
- 3 J
- 30 - 265 mA
- 11,800 V
- 6,200 V
- 9.0 x 19.0 x 23.3 cm
- Energiser, power supply unit, fence and earth connecting cable

Art. No.	Unit	EAN
10896	1	4 014803 108968

Art. No.	Unit	EAN
10882	1	4 014803 464163

Recommended accessories:

- 12 V AGM battery 88 Ah (14549) ≥ service life: 40-122 days*
- 230 V power supply unit (47PSU0010EU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 20 W (14536)

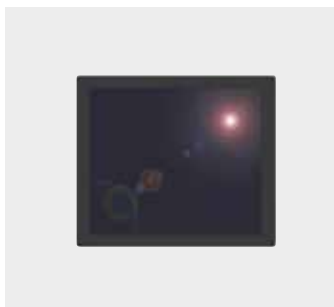
- 12 V battery special with 100 Ah (14126) ≥ service life: 16-138 days*
- 230 V power supply unit (47PSU0010EU)
- Earth stake 3 x 1 m (14041-1)
- Solar panel 1 x 30 W (14537)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V battery special with 100 Ah (14126)



Solar panel 20 W (14536)



Solar panel 30 W (14537)

farmer® 12V **Battery energisers 12 V**



ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Ergonomic portable handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC and PP)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds 9 and 12 V batteries up to a size of 265 x 192 x 225 mm



Rear view



Fence terminal

Earth terminal

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to 12 V battery operation.

Features

- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Rechargeable battery or battery is integrated into the handy transport box where it is protected from the weather
- Contact with the battery or the acid is avoided during transport
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 900



Housing can be secured by padlock



Device for attachment of appropriate solar panel to the back of the energiser cover



Solar panel can be folded away to the side for transport

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

DUAL

farmer® AN1000

farmer® AN1000Solar



Max. fence length:



Netting:	6 x 50 m
As per CEE:	40 km
Without vegetation:	10 km
Average vegetation:	3.5 km
High vegetation:	1.2 km

Netting:	6 x 50 m
As per CEE:	40 km
Without vegetation:	10 km
Average vegetation:	3.5 km
High vegetation:	1.2 km

Animal husbandry:



Input:

• 1.4 J

• 1.4 J

Max. output:

• 1 J

• 1 J

Energy consumption:

• 9 V: 40 - 70 mA
• 12 V: 30 - 90 mA

• 9 V: 40 - 70 mA
• 12 V: 30 - 90 mA

Max. voltage:

• 11,000 V

• 11,000 V

Voltage 500 Ω:

• 4,800 V

• 4,800 V

Dimensions (L x W x H):

• 24.0 x 31.5 x 38.0 cm

• 24.0 x 31.5 x 38.0 cm

Scope of delivery:

• Energiser, fence, earth and battery connecting cable

• Energiser, fence, earth connecting cable, 10 W solar panel

Art. No.	Unit	EAN
10855	1	4 014803 108555

Art. No.	Unit	EAN
10856	1	4 014803 108562

Recommended accessories:

- 12 V battery special with 60 Ah (14548) ≥ service life: 39-118 days* or 12 V lead-fleece battery with 75 Ah (14479, 26) ≥ service life: 34-104 days*
- 230 V power supply unit (47PSU-0010FEU)
- Earth stake 1 x 1 m (14041-1)
- Solar panel 1 x 10 W (14546)

- 12 V battery special with 60 Ah (14548) ≥ service life: 39-118 days* or 12 V lead-fleece battery with 75 Ah (14479) ≥ service life: 34-104 days*
- 230 V power supply unit (47PSU-0010FEU)
- Earth stake 1 x 1 m (14041-1)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V battery special with 60 Ah (14548)

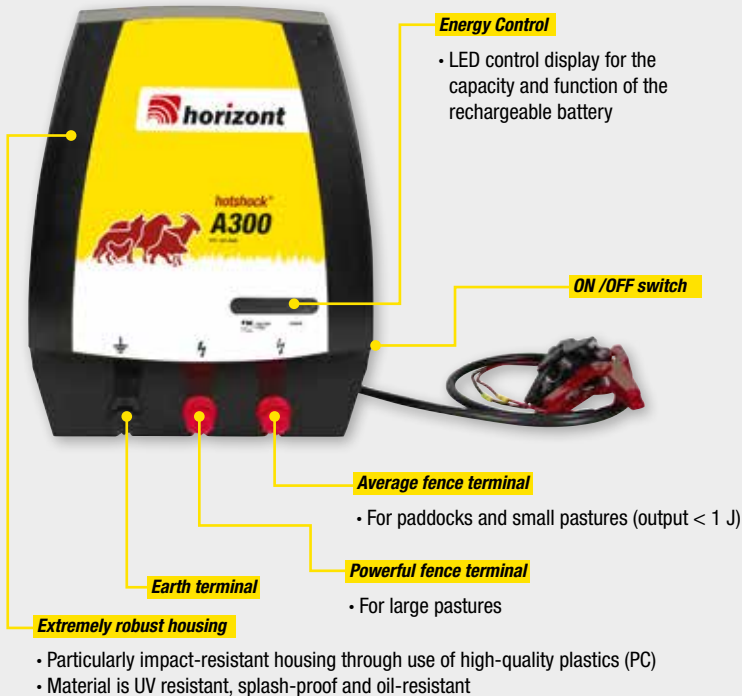


12 V lead-fleece battery with 75 Ah (14479)



Solar panel 10 W with bracket (14546)

hotshock® Battery energisers 12 V

Energy Control

- LED control display for the capacity and function of the rechargeable battery

ON /OFF switch

Average fence terminal

- For paddocks and small pastures (output < 1 J)

Powerful fence terminal

- For large pastures

Earth terminal

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant

Energy supply



Features

- Two fence terminals for operating one large and one small pasture or paddock
- Automatic switch-over to solar operation
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



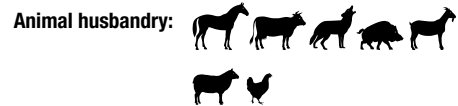
Ventilation slots to allow discharge of condensation water

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

hotshock® A300



Max. fence length:	Netting:	14 x 50 m
	As per CEE:	80 km
	Without vegetation:	30 km
	Average vegetation:	15 km
	High vegetation:	8 km



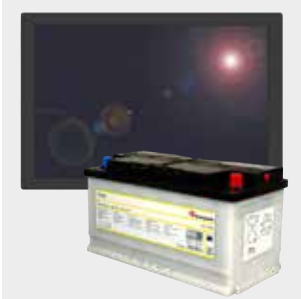
- Input:** • 4 J
- Max. output:** • 3 J
- Energy consumption:** • 340 mA
- Max. voltage:** • 11,000 V
- Voltage 500 Ω:** • 5,800 V
- Dimensions (L x W x H):** • 9.9 x 22.8 x 28.4 cm
- Scope of delivery:** • Energiser, fence, earth and battery connecting cable

Art. No.	Unit	EAN
10613	1	4 014803 006486

- Recommended accessories:**
- 12 V battery special with 100 Ah (14126) ≥ service life: 12 days*
 - Earth stake 3 x 1 m (14041-1)
 - Solar panel 1 x 20 W (14536) or 1 x 30 W (14537)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V battery special with 100 Ah (14126) and solar panel 30 W (14537)

hotshock® Battery energisers 12 V

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant



ON /OFF switch

Earth terminal

Powerful fence terminal

Average fence terminal

- For paddocks and small pastures (output < 1 J)

• For large pastures

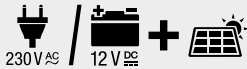
Control bar

- **Energy Control:** 3-stage LED control display for capacity and function of 9 or 12 V batteries
- **Impulse Control (cycle sequence monitoring):** Lights up when the device is in disrupted operation
- **System Control (argutector display):** Display at higher power consumption to maintain power
- **Voltage display:** 6-step LED display to check the fence voltage

Advantage:
2 in 1



Energy supply



Features

- Two fence terminals for operating one large and one small pasture or paddock
- Connection socket for the power supply unit at the back
- Straightforward and visual information display – easy remote monitoring possible
- Exhaustive discharge cut-off at 12 V
- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Microprocessor control
- Tested and built according to the applicable EU Directives and the safety standard EN60335-2-76 and DIN EN ISO 9001

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



Hanging device for wall mounting



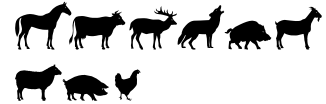
Ventilation slots to allow discharge of condensation water

COMBI hotshock® AN490



Max. fence length:	Netting:	14 x 50 m
	As per CEE:	130 km
	Without vegetation:	45 km
	Average vegetation:	20 km
	High vegetation:	10 km

Animal husbandry:



- Input: • 5.9 J
- Max. output: • 4.9 J
- Energy consumption: 110 - 435 mA
- Max. voltage: • 14,000 V
- Voltage 500 Ω: • 6,000 V
- Dimensions (L x W x H): 9.9 x 22.8 x 28.4 cm

- Scope of delivery: • Energiser, power supply unit, fence, earth and battery connecting cable

Art. No. Unit EAN

10813 1



Recommended accessories:

- 12 V battery special with 100 Ah (14126) ≥ service life: 9-44 days*
- Earth stake 3 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)

ranger® 12V **Battery energisers 12 V**



6 modes functions

1. **NORMAL:** Normal pulse sequence
2. **SMART:** Normal pulse sequence APN*
3. **DAY MODE:** Normal pulse sequence APN* by day, slow pulse sequence at night
4. **NIGHT MODE:** Normal pulse sequence APN* at night, slow pulse sequence by day
5. **SLOW MODE:** Slow pulse sequence APN* by day and at night
6. **ONLY NIGHT MODE:** Normal pulse sequence APN* at night, no pulse sequence by day = additional energy savings, more efficiency, lower operating costs

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant



ON /OFF switch & Menu pushbutton

LED control display

- **Energy Control:** 3-stage LED control display for capacity and function of 9 or 12 V batteries
- **Impulse Control (cycle sequence monitoring):** Lights up when the energiser is in disrupted operation
- **System Control (argutector display):** Display at higher power consumption to maintain power
- **Voltage display:** 6-step LED display to check the fence voltage

Average fence terminal

- For paddocks and small pastures (output < 1 J)

Powerful fence terminal

- For large pastures

Earth terminal

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

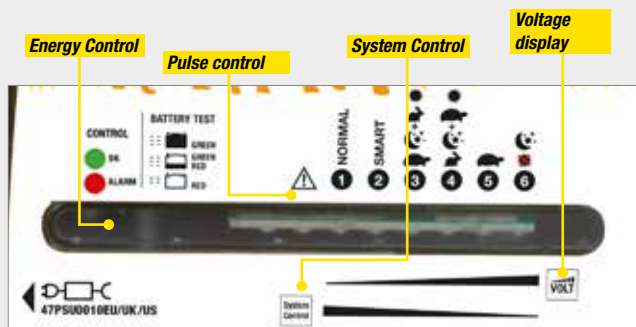
- Two fence terminals for operating one large and one small pasture or paddock
- Connection socket for the power supply unit at the back
- Straightforward and visual information display – easy remote monitoring possible
- Exhaustive discharge cut-off
- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



Ventilation slots to allow discharge of condensation water



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

*APN = Output energy level is set to 60 % of the maximum energy and automatically adjusted in case of load changes, e.g. due to vegetation along the fence

DUAL

ranger® AN360

ranger® AN490



Max. fence length:



Netting:	12 x 50 m
As per CEE:	90 km
Without vegetation:	43 km
Average vegetation:	17 km
High vegetation:	9 km

Netting:	14 x 50 m
As per CEE:	130 km
Without vegetation:	60 km
Average vegetation:	20 km
High vegetation:	10 km

Animal husbandry:



Input:

Max. output:

Energy consumption:

Max. voltage:

Voltage 500 Ω:

Dimensions (L x W x H):

Scope of delivery:

- 4.3 J
- 3.6 J
- 70 - 320 mA
- 12,000 V
- 5,200 V
- 9.9 x 22.8 x 28.4 cm
- Energiser, power supply unit, fence, earth and battery connecting cable

- 5.7 J
- 4.9 J
- 70 - 450 mA
- 12,000 V
- 5,200 V
- 9.9 x 22.8 x 28.4 cm
- Energiser, power supply unit, fence, earth and battery connecting cable

Art. No.	Unit	EAN
10997	1	4 014803 109972

Art. No.	Unit	EAN
10857	1	4 014803 108579

Recommended accessories:

- 12 V special battery with 100 Ah (14126) ≥ service life: 13-46 days*
- Earth stake 2 x 1.5 m (15017-1)
- Solar panel 1 x 30 W (14537)

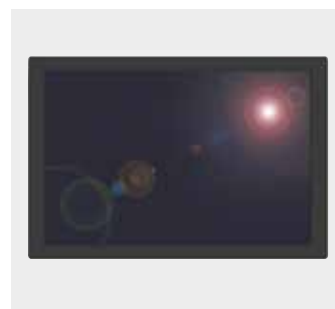
- 12 V battery special with 100 Ah (14126) ≥ service life: 9-44 days*
- Earth stake 3 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V battery special with 100 Ah (14126)



Solar panel 30 W (14537)



Solar panel 50 W (14873)

ranger® 12V  Battery energisers 12 V



LED control display

- **Impulse Control (cycle sequence monitoring):** Lights up when the energiser is in disrupted operation
- **System Control (argutector display):** Display at higher power consumption to maintain power
- **Voltage display:** 6-step LED display to check the fence voltage

ON/OFF switch, menu push-button & Energy Control

- LED control display for the capacity and function of the 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



Dual energiser with Safety*

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Features

- 9 or 12 V batteries are integrated into the handy portable box where it is protected from the weather
- Contact with the rechargeable battery or the acid is avoided during transport
- Exhaustive discharge cut-off
- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Housing can be secured by padlock



Device for attaching the appropriate solar panel to the back of the energiser cover



Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand

Rotary potentiometer

- The output energy level (APN*) can be preselected on the rotary potentiometer (100% - 50%)

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC and PP)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds 9 and 12 V batteries with a size up to 265 x 142 x 225 mm

6 modes functions

1. **NORMAL:** Normal pulse sequence
2. **SMART:** Normal pulse sequence APN*
3. **DAY MODE:** Normal pulse sequence APN* by day, slow pulse sequence at night
4. **NIGHT MODE:** Normal pulse sequence APN* at night, slow pulse sequence by day
5. **SLOW MODE:** Slow pulse sequence APN* by day and at night
6. **ONLY NIGHT MODE:** Normal pulse sequence APN* at night, no pulse sequence by day = additional energy savings, more efficiency, lower operating costs



Rear view



Earth terminal

Fence terminal

System Control Pulse control Voltage display Rotary potentiometer



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



*APN = Output energy level is set to 50 % of the maximum energy and automatically adjusted in case of load changes, e.g. due to vegetation along the fence

DUAL

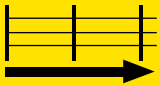
ranger® AN2000

ranger® AN3000

ranger® AN4800



Max. fence length:



Netting:	10 x 50 m
As per CEE:	50 km
Without vegetation:	20 km
Average vegetation:	4.5 km
High vegetation:	1.7 km

Netting:	12 x 50 m
As per CEE:	100 km
Without vegetation:	33 km
Average vegetation:	5 km
High vegetation:	2 km

Netting:	14 x 50 m
As per CEE:	130 km
Without vegetation:	60 km
Average vegetation:	20 km
High vegetation:	10 km

Animal husbandry:



Input:

Max. output:

Energy consumption:

Max. voltage:

Voltage 500 Ω:

Dimensions (L x W x H):

Scope of delivery:

- 2.7 J
- 2 J
- 65 - 215 mA
- 12,000 V
- 4,700 V
- 24.0 x 31.5 x 38.0 cm
- Energiser, fence connection cable

- 3.5 J
- 3 J
- 75 - 275 mA
- 12,000 V
- 5,200 V
- 24.0 x 31.5 x 38.0 cm
- Energiser, fence connection cable

- 5.7 J
- 4.8 J
- 85 - 450 mA
- 12,000 V
- 5,200 V
- 24.0 x 31.5 x 38.0 cm
- Energiser, fence connection cable

Art. No.	Unit	EAN
10854	1	4 014803 108548

Art. No.	Unit	EAN
10992	1	4 014803 109927

Art. No.	Unit	EAN
10993	1	4 014803 109934

Recommended accessories:

- 12 V AGM battery with 95 Ah (14600) ≥ service life: 17-78 days* or 12 V lead-fleece battery with 75 Ah (14479) ≥ service life: 15-69 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 2 x 1 m (14041-1)
- Solar panel 1 x 20 W (14538) or 1 x 30 W (14539)

- 12 V AGM battery with 95 Ah (14600) ≥ service life: 13-78 days* or 12 V lead-fleece battery with 75 Ah (14479) ≥ service life: 11-69 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 3 x 1 m (14041-1)
- Solar panel 1 x 20 W (14538) or 1 x 30 W (14539)

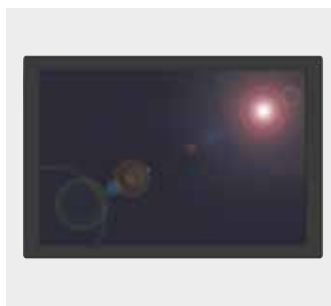
- 12 V AGM battery with 95 Ah (14600) ≥ service life: 8-37 days* or 12 V lead-fleece battery with 75 Ah (14479) ≥ service life: 7-33 days*
- 230 V power supply unit (47PSU0010FEU)
- Earth stake 5 x 1 m (14041-1)
- Solar panel 1 x 30 W (14539) or 1 x 50 W (14873)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V AGM battery with 95 Ah (14600)



Solar panel 30 W (14539)



Solar panel 50 W (14873)

turbomax® 12V Battery energisers 12 V



Side view

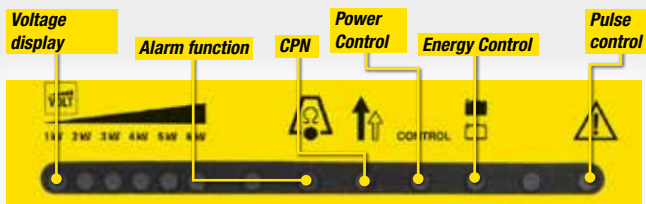
Earth terminal

Fence terminal

Advantage:
2 in 1

LED control display

- **Voltage display:** 6-step LED display to check the earthing and fence voltage
- **Alarm function:** Optical and acoustic alarm when the voltage drops below 400 ohms, the fence should be checked for faults or damage
- **2-stage CPN technology:** In the event of faults, higher energies are automatically fed into the fence (LED lights up red) after a safety margin of 55 seconds to ensure the safety of the herd
- **Power Control:** Shows the activity of the energiser and flashes in time with the pulse output
- **Energy Control:** LED control display for capacity and function of 9 or 12 V batteries
- **Impulse Control (cycle sequence monitoring):** Lights up when the energiser is in disrupted operation



Energy supply



Dual energiser with Safety+

Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure! The energiser switches over automatically to battery operation.

Safety advice

In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

Features

- Hanging device for wall mounting
- ON/OFF switch integrated on the side
- Connection socket for the power supply unit on the underside
- Straightforward and visual information display – remote monitoring possible
- Exhaustive discharge cut-off
- turbomax technology: for fence loads > 500 ohms the energiser works with an enormously high energy potential to reliably supply the fence
- Automatic switch-over to solar operation
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001

DUAL

turbomax® AN800



Max. fence length:	Netting:	17 x 50 m
	As per CEE:	180 km
	Without vegetation:	55 km
	Average vegetation:	21 km
	High vegetation:	14 km

Animal husbandry:



- Input:** - 12 J
- Max. output:** - 8 J
- Energy consumption:** - 500 - 1,200 mA
- Max. voltage:** - 12,000 V
- Voltage 500 Ω:** - 4,400 V
- Dimensions (L x W x H):** - 10.6 x 23.4 x 29.8 cm
- Scope of delivery:** - Energiser, mains plug, battery connecting cable

Art. No.	Unit	EAN
10749	1	4 014803 107497

Recommended accessories:

- 12 V battery special with 230 Ah (25012B) ≥ service life: 8-19 days*
- Earth stake 5 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)
- Large-capacity battery box (21264)
- Warning sign international (14127)
- Earth cable

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



12 V battery special with 230 Ah (25012B) and solar panel 50 W (14873)

* The figures refer to a calculated use of 100 % of the stated capacity.



Mains energisers 230 V

The use of a mains energiser assumes that you can access a mains connection in the immediate vicinity of the pasture area.

A mains energiser has the following advantages over other types of power supply:

- High efficiency
- Continuous & reliable operation on 230 V mains
- High operating comfort - no battery replacement necessary
- Can also be used with denser vegetation and animals that are difficult to herd
- Reasonable consumption

trapper® Mains energiser 230 V



Power Control

- Shows the activity of the energiser
- Flashes in time with the pulse output



Handy housing

- Particularly impact-resistant housing through use of high-quality ABS plastics (PC and PP)
- Material is UV resistant, splash-proof and oil-resistant

Energy supply



Features

- Very sturdy housing
- Power Control (pulse control)
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting

trapper® N45



Max. fence length:	Netting:	3 x 50 m
	As per CEE:	15 km
	Without vegetation:	4 km
	Average vegetation:	2 km
	High vegetation:	0.8 km

Animal husbandry:



- Input:** • 0.8 J
- Max. output:** • 0.45 J
- Energy consumption:** • 1.5 W
- Max. voltage:** • 8,000 V
- Voltage 500 Ω:** • 3,900 V
- Dimensions (L x W x H):** • 5.8 x 12.4 x 17.2 cm
- Scope of delivery:** • Energiser, mains plug, dowels, screws

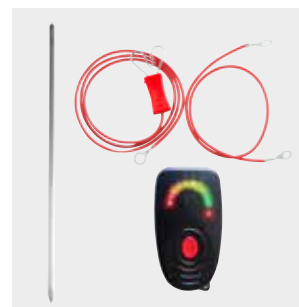
Art. No.	Unit	EAN
10864	1	4 014803 108647

Recommended accessories:

- Earth stake 1 x 1 m (14041-1)
- Fence connection kit (15522C)
- Fence tester farmer (14527C)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake (14041-1), fence connection kit (15522C), fence tester farmer (14527C)



farmer® Mains energiser 230 V



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant



Earth terminal

Fence terminal

Power Control

- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



230V AC

Features

- Very sturdy housing
- Power Control (pulse control)
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



Ventilation slots to allow discharge of condensation water

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

farmer® N200



Max. fence length:	Netting:	10 x 50 m
	As per CEE:	50 km
	Without vegetation:	15 km
	Average vegetation:	4 km
	High vegetation:	1.4 km

Animal husbandry:



- Input:** • 2.8 J
- Max. output:** • 2 J *
- Energy consumption:** • 5 W
- Max. voltage:** • 14,000 V
- Voltage 500 Ω:** • 5,200 V
- Dimensions (L x W x H):** • 9.9 x 22.8 x 28.4 cm
- Scope of delivery:** • Energiser, mains plug, dowels and screws

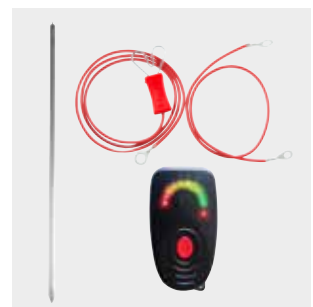
Art. No.	Unit	EAN
10996	1	4 014803 109965

Recommended accessories:

- Earth stake 2 x 1 m (14041-1)
- Fence connection kit (15522C)
- Fence tester farmer (14527C)
- Warning sign international (14127)
- Lightning protection choke (15482)
- Earth cable

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake 1 m (14041-1), fence connection kit (15522C), fence tester farmer (14527C)

hotshock® Mains energiser 230 V

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant



Impulse Control (cycle sequence monitoring)

- Lights up when the energiser drops below the power limit – disrupted operation

Average fence terminal

- For paddocks and small pastures (output < 1 J)

Earth terminal

Powerful fence terminal

- For large pastures

Power Control

- Shows the activity of the energiser
- Flashes in time with the pulse output

Energy supply



230V AC

Features

- Two fence terminals for operating one large and one small pasture or paddock
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



Ventilation slots to allow discharge of condensation water

Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.

* at 110 % test voltage 253 V

hotshock® N500



Max. fence length:	Netting:	16 x 50 m
	As per CEE:	120 km
	Without vegetation:	45 km
	Average vegetation:	20 km
	High vegetation:	10 km

Animal husbandry:



Input:

- 6 J

Max. output:

- 5 J *

Energy consumption:

- 8 W

Max. voltage:

- 9,500 V

Voltage 500 Ω:

- 6,000 V

Dimensions (L x W x H):

- 9.9 x 22.8 x 28.4 cm

Scope of delivery:

- Energiser, mains plug, dowels and screws

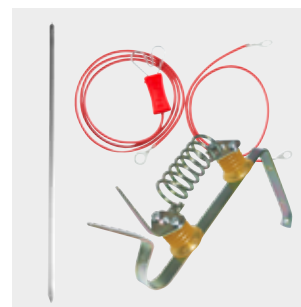
Art. No.	Unit	EAN
10614	1	4 014803 106148

Recommended accessories:

- Earth stake 3 x 1.5 m (15017-1)
- Fence connection kit (15522C)
- Lightning protection choke (15482)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake 1.5 m (15017-1), fence connection kit (15522C), lightning protection choke (15482)



COMPLETE SOLUTION FOR DETERRING PIGEONS



Animal husbandry:



- Input: • 0.15 J
- Max. output: • 0.10 J
- Energy consumption: • 1 W
- Max. voltage: • 5,000 V
- Dimensions (L x W x H): • 7.3 x 11.1 x 14.4 cm
- Scope of delivery: • Energiser, mains plug, screws, dowels



- 0.45 J
- 0.35 J
- 2 W
- 4,300 V
- 6.7 x 23.0 x 19.1 cm
- Energiser, mains plug, screws, dowels

Art. No.	Unit	EAN
10430	1	4 014803 003409

Art. No.	Unit	EAN
10407	1	4 014803 001238

Recommended accessories:

- Earth cable (14524)
- Earth stake 1 x 1 m (14041-1)

- Earth cable (14524)
- Lightning protection choke 2 x (15482)

stallmaster

- Specially developed pulse generator where the output values are adapted to stable applications (cow trainer)
- Approved by the German Federal Veterinary Office (BVET)
- If there is a longer contact with the animal, the energiser switches off after 4-5 pulses. The energiser is restarted by removing the mains plug from the socket for a few seconds before plugging it back in.

scout N2

- The problem: From a hygienic perspective, city pigeons are classified as pests. An average of 10 to 12 kg of wet droppings are produced per year per pigeon. Pigeon droppings corrode building materials such as sandstone, concrete, aluminium, steel, marble and brick. The droppings infiltrate the material and slowly erode it. Regardless of the damage, pigeon droppings make the object look unsightly and neglected. Pigeons can also be carriers of pathogens. In addition, pigeon nests are infested with a variety of vermin such as ticks and fleas, which can also spread to homes.
- The solution: The most effective method of keeping pigeons away is an electrical system in combination with the special pulse generator "scout® N2" from horizon. These electrical systems are virtually invisible and can be adapted as flexible profiles to suit building conditions. The electrical conductors and connectors are made of special alloys and generate low resistance even for long installation distances.
- Special energiser, only for use as pigeon deterrent
- Particularly strong radio interference suppression for trouble-free operation of electrical equipment in buildings



HORIZONT SPECIAL SOLUTIONS FOR YOU

Contact the competent horizon employees with your request, they will help you realise your project professionally. horizon cooperates with many well-known specialists in this field who offer individual and complete solutions for problems on site.

+49 (0) 56 31 / 5 65 - 100

ranger® Mains energiser 230 V



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant

Impulse Control (cycle sequence monitoring)

- Lights up when the energiser drops below the power limit – disrupted operation

Control display

- **Voltage display:** 6-step display to check the fence voltage
- **Earthing control:** Display for checking the earthing



Average fence terminal

- For paddocks and small pastures (output < 1 J)

Powerful fence terminal

- For large pastures

Energy supply



230V AC

Dual energisers

Advantage: 2 in 1! Dual energisers can be connected in parallel to 230 V mains power and a 12 V battery. Uninterrupted operation is guaranteed in the event of a power failure.

Features

- Two fence terminals for operating one large and one small pasture or paddock
- Straightforward and visual information display – easy remote monitoring possible
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



Hanging device for wall mounting



Ventilation slots to allow discharge of condensation water

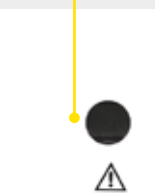
Voltage display



Earthing control



Pulse control



Safety advice: In 230 V operation, the energiser and the power supply unit should and must be installed in a room protected from moisture. Please also see the note on page 16.



Mains energisers 230 V

ranger® N270

ranger® N420



Max. fence length:

Netting:	12 x 50 m
As per CEE:	60 km
Without vegetation:	20 km
Average vegetation:	5 km
High vegetation:	2 km

Netting:	16 x 50 m
As per CEE:	100 km
Without vegetation:	40 km
Average vegetation:	10 km
High vegetation:	4 km

Animal husbandry:



- Input:**
- Max. output:**
- Energy consumption:**
- Max. voltage:**
- Voltage 500 Ω:**
- Dimensions (L x W x H):**
- Scope of delivery:**

- 3.4 J
- 2.7 J
- 5 W
- 13,500 V
- 5,400 V
- 9.9 x 22.8 x 28.4 cm
- Energiser, mains plug, dowels and screws

- 6 J
- 4.2 J
- 7 W
- 9,300 V
- 5,600 V
- 9.9 x 22.8 x 28.4 cm
- Energiser, mains plug, dowels and screws

Art. No.	Unit	EAN
10608	1	4 014803 106087

Art. No.	Unit	EAN
10742	1	4 014803 107428

Recommended accessories:

- Earth stake 2 x 1.5 m (15017-1)
- Lightning protection choke (15482)
- Fence connection kit (15522C)
- Warning sign international (14127)
- Earth cable

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake 1.5m (15017-1)



Lightning protection choke (15482)



Fence connection kit (15522C)

turbomax® Mains energiser 230 V

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant



Side view

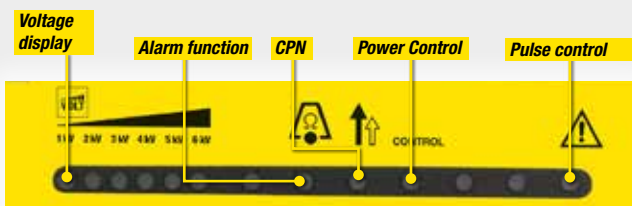


Fence terminal

Earth terminal

LED control display

- **Voltage display:** 6-step LED display to check the earthing and fence voltage
- **Alarm function:** Optical and acoustic alarm when the voltage drops below 400 ohms, the fence should be checked for faults or damage
- **2-stage CPN technology:** In the event of faults, higher energies are automatically fed into the fence (LED lights up red) after a safety margin of 55 seconds to ensure herding security
- **Power Control:** Shows the activity of the energiser and flashes in time with the pulse output
- **Impulse Control (cycle sequence monitoring):** Lights up when the energiser is in disrupted operation



Energy supply



230V AC

Features

- Straightforward and visual information display – remote monitoring possible
- turbomax technology: for fence loads > 500 ohms the energiser works with an enormously high energy potential to reliably supply the fence
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



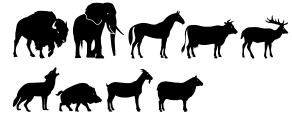
Hanging device for wall mounting

turbomax® N1430



Max. fence length:	Netting:	30 x 50 m
	As per CEE:	320 km
	Without vegetation:	85 km
	Average vegetation:	40 km
	High vegetation:	25 km

Animal husbandry:



Input:	• 25 J
Max. output:	• 14.3 J
Energy consumption:	• 35 W
Max. voltage:	• 12,000 V
Voltage 500 Ω:	• 4,600 V
Dimensions (L x W x H):	• 10.6 x 23.4 x 29.8 cm
Scope of delivery:	• Energiser, mains plug

Art. No.	Unit	EAN
10748	1	4 014803 107480

Recommended accessories:

- Earth stake 9 x 1.5 m (15017-1)
- Large-capacity battery box (21264)
- Fence tester turbomax (14151C)
- Lightning protection choke (15482)
- Warning sign international (14127)
- Earth cable

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Fence tester turbomax (14151C), lightning protection choke (15482)



Solar energisers

The following horizon solar energisers have an integrated solar panel. This supports the 12 V battery in that it does not need to be recharged so often, as it is discharged more economically.

The solar support is a worthwhile investment in the long term, especially during the sunny times of the year.

The advantage of the solar energisers is that they are delivered fully assembled. The energiser is therefore immediately operational after the rechargeable battery has been fully charged. The components are matched to each other so that the energisers on the fence provide super performance.

trapper® Solar energisers



Ergonomic carrying handle

- Easy to move with one hand



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (ABS)
- Material is UV resistant, splash-proof and oil-resistant

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

TIP

Charge the battery before starting up!

Robust plastic solar panel

- Environmentally friendly use of solar energy
- Compact unit of energiser and solar panel

Rear view



Earth terminal

Fence terminal

Energy supply



Features

- Very sturdy housing
- Power Control (pulse control)
- Automatic switch-over to solar operation
- Solar charging control installed weather-protected in housing
- Microprocessor control



Plug-in profile for earthing rod in housing



230 V charging socket to keep the integrated 12 V battery charged



Twist lock on the back to open the housing



Inclined front for easy alignment of solar panel to the sun

trapper® AS25



Max. fence length:	As per CEE:	8.5 km
	Without vegetation:	5 km
	Average vegetation:	3 km
	High vegetation:	0.9 km

Animal husbandry:



Input:

- 0.33 J

Max. output:

- 0.25 J

Energy consumption:

- 26 mA

Max. voltage:

- 9,000 V

Voltage 500 Ω:

- 3,000 V

Dimensions (L x W x H):

- 23.1 x 37.4 x 32.0 cm

Scope of delivery:

- Energiser, power supply unit, earth stake (approx. 30 cm), 12 V battery, 5 W solar panel, fence and earth connecting cable

Art. No. Unit EAN

14982

1

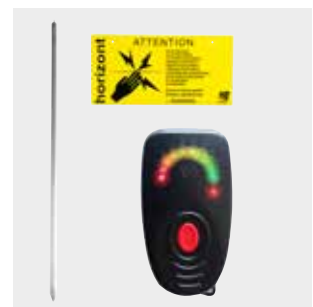
4 014803 149824

Recommended accessories:

- Earth stake 1 x 1 m (14041-1)
- Fence tester farmer (14527C)
- Warning sign international (14127)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake (14041-1), fence tester farmer (14527C), warning sign, international (14127)



farmer® Solar energisers



Ergonomic carrying handle

- Easy to move with one hand



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (ABS)
- Material is UV resistant, splash-proof and oil-resistant

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

TIP

Charge the battery before starting up!

Robust plastic solar panel

- Environmentally friendly use of solar energy
- Compact unit of energiser and solar panel

Rear view



Earth terminal

Fence terminal

Energy supply



Features

- ECO Power / power saving function: The power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control



230 V charging socket to keep the integrated 12 V battery charged



Twist lock on the back to open the housing



Plug-in profile for earthing rod in housing



Inclined front for easy alignment of solar panel to the sun

farmer® AS50



Max. fence length:	As per CEE:	8.5 km
	Without vegetation:	5 km
	Average vegetation:	3 km
	High vegetation:	0.9 km

Animal husbandry:



- Input:** - 0.65 J
- Max. output:** - 0.5 J
- Energy consumption:** - 20 - 50 mA
- Max. voltage:** - 11,000 V
- Voltage 500 Ω:** - 3,600 V
- Dimensions (L x W x H):** - 23.1 x 37.4 x 32.0 cm
- Scope of delivery:** - Energiser, power supply unit, 12 V rechargeable battery, 10 W solar panel, fence and earth connecting cable

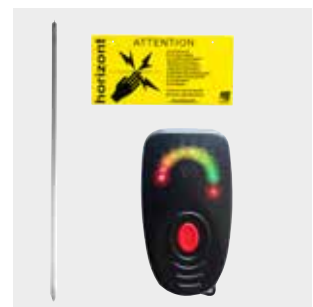
Art. No.	Unit	EAN
14485	1	4 014803 463234

Recommended accessories:

- Earth stake 1 x 1 m (14041-1)
- Fence tester farmer (14527C)
- Warning sign international (14127)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake (14041-1), fence tester farmer (14527C), Warning sign international (14127)

farmer® Solar energisers



Ergonomic carrying handle

- Easy to move with one hand



Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (ABS)
- Material is UV resistant, splash-proof and oil-resistant

TIP

Charge the battery before starting up!

Robust plastic solar panel

- Environmentally friendly use of solar energy
- Compact unit of energiser and solar panel

ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of 9 or 12 V batteries
- Shows the activity of the energiser
- Flashes in time with the pulse output

Rear view



Earth terminal

Fence terminal

Energy supply



Features

- ECO Power / power saving function: the power economiser automatically adjusts power consumption to the status of the fence = less energy consumption, less environmental impact and lower costs
- Automatic switch-over to solar operation
- Solar charging control installed in the energiser is weather protected – easy charging of different types of rechargeable batteries
- Microprocessor control



230 V charging socket to keep the integrated 12 V battery charged



Twist lock on the back to open the housing



Plug-in profile for earthing rod in housing



Inclined front for easy alignment of solar panel to the sun

NEW farmer® AS180



Max. fence length:	As per CEE:	48 km
	Without vegetation:	14 km
	Average vegetation:	5 km
	High vegetation:	1.5 km

Animal husbandry:



Input:

- 2.0 J

Max. output:

- 1.4 J

Energy consumption:

- 30 - 200 mA

Max. voltage:

- 10,000 V

Voltage 500 Ω:

- 4,600 V

Scope of delivery:

- Energiser, power supply unit, earth stake (approx. 30 cm), 12 V battery, 24 W solar panel, fence and earth connecting cable

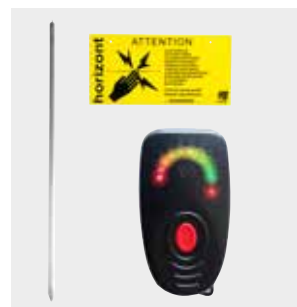
Art. No.	Unit	EAN
10919	1	4 014803 109194

Recommended accessories:

- Earth stake 2 x 1 m (14041-1)
- Fence tester farmer (14527C)
- Warning sign international (14127)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake (14041-1), fence tester farmer (14527C), warning sign international (14127)



ranger® Solar energisers



Holding device for solar panel

- Easy attachment of the solar panel to the holding device
- 4 different setting angles and a transport position of the solar panel possible

Ergonomic carrying handle

- Carrying comfort thanks to soft grip padding
- Easy to move with one hand
- Solar panel and spiked post are permanently attached to the energiser

**Advantage:
2 in 1**



ON/OFF switch & Energy Control

- 3-stage LED control display for capacity and function of the battery
- Shows the activity of the energiser
- Flashes in time with the pulse output

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splash-proof and oil-resistant
- Housing holds batteries with a capacity up to 34 Ah

Energy supply



Features

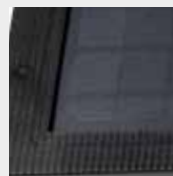
- Robust plastic solar panel
- Environmentally friendly use of solar energy
- Compact unit of energiser and solar panel
- Holding device for solar panel
- 4 different setting angles and a transport position
- Particularly sturdy housing, impact-resistant plastic with UV stabiliser
- Integrated earth stake
- Automatic switch-over in solar operation
- Solar charging control installed in the energiser is weather protected - easy charging of different types of 12 V batteries
- Microprocessor control
- Tested and built according to the applicable EU directives and the safety standard EN60335-2-76 and DIN EN ISO 9001



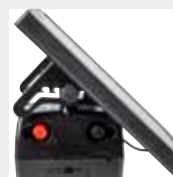
The devices can tip over, especially on uneven surfaces and / or in stronger winds. The U-earth stake ensures the safe set up of the devices even in windy conditions and on uneven ground.



The 3-level battery indicator shows the capacity and filling level of the battery. If the capacity should ever drop too much, e.g. out of season, the battery can easily be recharged.



The installed solar panels are notable for their high efficiency. This is demonstrated by the small surface area at the rated outputs of 20 and 30 watts. The devices are equipped with a solar charge controller.



The panels are placed on a plastic substrate and covered with a transparent plastic layer. For stabilisation, the panels are inserted into a plastic frame made of polycarbonate.

Side view



Earth terminal

Fence terminal



Solar energisers

DUAL

ranger® AS120

ranger® AS180



Max. fence length:



Netting:	6 x 50 m
As per CEE:	43 km
Without vegetation:	12 km
Average vegetation:	4 km
High vegetation:	1.4 km

Netting:	8 x 50 m
As per CEE:	48 km
Without vegetation:	14 km
Average vegetation:	4.3 km
High vegetation:	1.6 km

Animal husbandry:



Input:

Max. output:

Energy consumption:

Max. voltage:

Voltage 500 Ω:

Dimensions (L x W x H):

Scope of delivery:

- 1.5 J
- 1.2 J
- 28-104 mA
- 12,700 V
- 4,300 V
- 203 x 455 x 395.5 mm
- Energiser, solar 20 W solar panel 12 V / 34 Ah rechargeable battery, earth stake (double spike), fence and earth connecting cable, plug-in power supply

- 2.5 J
- 1.8 J
- 24-140 mA
- 11,100 V
- 4,600 V
- 203 x 575 x 395.5 mm
- Energiser, solar 30 W solar panel 12 V / 34 Ah rechargeable battery, earth stake (double spike), fence and earth connecting cable, plug-in power supply

Art. No.	Unit	EAN
10986	1	4 014803 109866

Art. No.	Unit	EAN
10987	1	4 014803 109873

Recommended accessories:

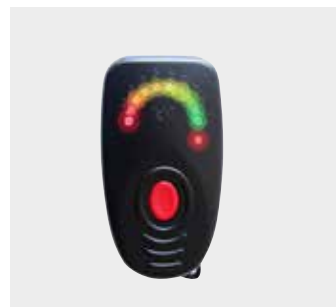
- Earth stake 2 x 1 m (14041-1)
- Fence tester farmer (14527C)
- Warning sign international (14127)

Selected accessories

Find matching accessories for your horizon energiser in the comprehensive horizon range here in the catalogue or on the horizon website under the corresponding article number.



Earth stake (14041-1)



Fence tester farmer (14527C)



Warning sign international (14127)



03

Energy supply

Before the electric fence system can be put into operation, the fence must be energised. There are a number of things to consider when choosing the right energy supply. A power supply for mains energisers is always ensured by connecting them to a mains. For 9 and 12 V energisers, it is important to select the right type of battery to match the power consumption. A supportive and, above all, sustainable use of solar panels is possible in order to guarantee the longest possible energy supply.

62 | Guide

65 | Product guide

67 | Dry-cell and block batteries

68 | 12 V batteries

69 | Accessories for 9 and 12 V batteries

70 | Chargers and power supply units

67 | Portable and vandal proof boxes

72 | Solar solutions

76 | Solar mounts

THINGS TO KNOW ABOUT

ENERGY SUPPLY

Before the electric fence system can be put into operation to protect animals, the fence must be energised by means of a power supply. There are a number of things to consider when choosing the right energy supply. A power supply for mains energisers is always ensured by connecting them to a mains. For battery-powered energisers, it is important to select the correct type of 9 or 12 V batteries for the corresponding energiser. A supportive and, above all, sustainable use of solar panels is possible in order to guarantee the longest possible energy supply.

1. ALKALINE AND ZINC-CARBON BATTERY (9 VOLT)

There are two different battery versions. Alkaline batteries on the one hand (so-called air-oxygen batteries) and zinc-carbon batteries on the other. Both battery versions supplied by horizon are mercury- and cadmium-free and therefore ecofriendly.

Alkaline battery

The special thing about alkaline batteries is the voltage curve. These batteries maintain a consistently high voltage for most of their operating life (see yellow curve in the graph below), thus guaranteeing a high level of herding security over the period of use – even when using powerful battery energisers.



The alkaline battery is only activated when it comes into contact with oxygen. Before connecting to the energiser, it is essential to completely remove the sticker on the lid of the alkaline battery to activate the oxygen contact.

Zinc-carbon battery

The voltage curve of zinc-carbon batteries continuously decreases throughout the operating life (see red curve in the graph below). As of a battery voltage of approx. 5.5 V, batteries are flat and must be replaced. Less powerful energisers are operated with a zinc-carbon battery. The steady voltage drop does not affect the important herding voltage in the fence at low power requirements.

2. LEAD-FLEECE AND SPECIAL BATTERY (12 VOLT)

horizont recommends the use of lead-fleece batteries or special batteries for energisers. Common car starter batteries (accumulators) are at a decisive disadvantage for use with energisers due to a high self-discharge rate. In addition, they are only cycle-resistant to a limited extent, i.e. they maintain significantly fewer charge/discharge processes.

Lead-fleece battery

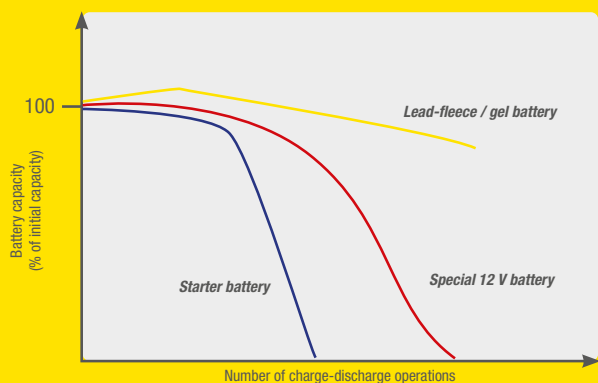
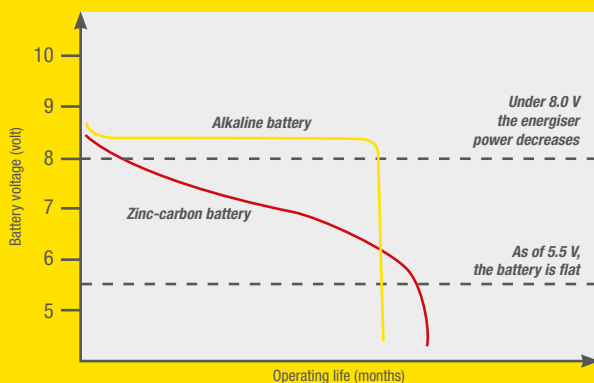
The horizon lead-fleece batteries for 12 V energisers are filled. They have low self-discharge and very good cycle resistance. Lead-fleece batteries are completely sealed, preventing any leakage of liquids. In addition, the silicic acid inside is bound in fleece. There is also no need to refill battery acid. A horizontal or vertical position of the 12 V battery is irrelevant during transport and operation. Additional connecting cables do not need to be ordered to connect a horizon super-fleece battery; these are already included in the delivery.

Special 12 V battery

The special 12 V batteries from horizon are dry pre-charged. We recommend checking the acid level every four weeks. You can tell how high the acid level is by the min. and max. markings directly on the battery. The battery should be fully charged once before use, after which it can be easily connected to your energiser. The poles of your batteries should always be protected against the weather to promote operating life and prevent unwanted discharging. It is best to place your battery on a firm and level surface. For example, we recommend using a large-capacity battery transport box. This box can even accommodate your energiser; it can also be locked to protect the battery and energiser from theft. No additional connecting cables are required to connect your battery to your energiser; these are located directly on the horizon energiser.

TIP

- 9V batteries cannot be recharged: if your battery has a voltage of 5.5 V, it is flat and should be disposed of – each horizon battery can be stored for up to two years without any significant loss of capacity
- Each horizon battery is fitted with connecting cables - no additional accessories are required for connection to the energiser
- Charge your special or lead-fleece battery only with regulated chargers to guarantee a long service life - you will find optimal accessories here: 64.
- Make sure that the 12 V battery is well ventilated



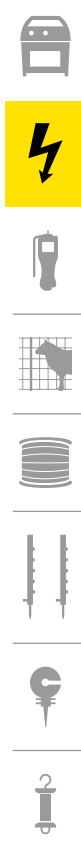


Photovoltaic cells collect sunlight and convert it into electrical energy

The charging regulator integrated in the energiser protects against possible overcharging if necessary

The electrical pulse is conducted to the fence via the connecting cable

The battery stores the generated energy

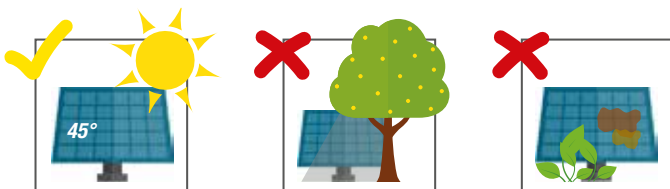


3. SOLAR

Today, electricity is increasingly being generated with photovoltaics, which is a way of doing good not only for oneself but also for the environment. After all, generating electricity with a solar installation saves fossil fuels. Ultimately everyone can positively influence the ecological footprint. This very point of sustainability and environmental friendliness can also be applied to the additional use of horizon solar panels in combination with energisers.

All 50-watt solar panels from horizon have a practical charge regulator which automatically adjusts the voltage to prevent damage to the energiser and battery. The horizon range also includes other solar panels with different wattages. These solar panels have no integrated charge regulator. This is built into the energiser or is not required with the correct combination of solar panel and special 12 V battery.

Correct use of the solar panel



Alignment angle 45 degrees

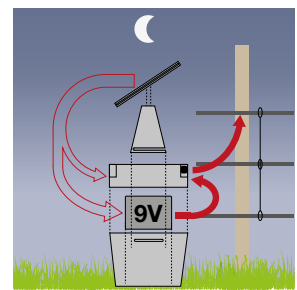
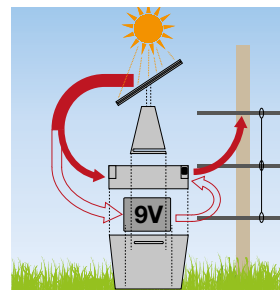
No overshadowing from trees

No soiling or vegetation

To check your 12 V battery, first disconnect the solar panel and wait for 15 minutes before measuring the voltage on the battery. This ensures that you will measure the actual power of the battery – without support from the solar panel. If you measure the battery power in the dark, the solar panel can remain connected.

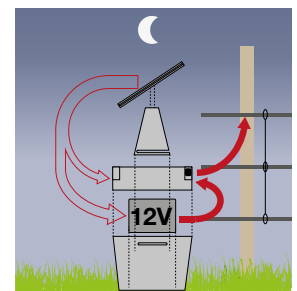
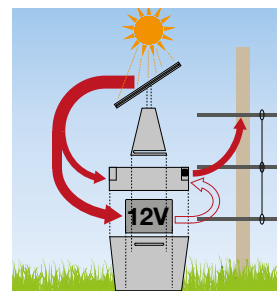
Your 12 V battery can be charged via the solar panel. A regulated charger should, however, be used to charge the battery for the first time - before it is put into operation or before the grazing season begins. You can never operate an energiser with just the solar panel alone. You must always connect a 9 or 12 V batteries as a buffer. Every 9 V and 12 V energiser from horizon can also be operated with a solar panel.

4. COMMISSIONING A SOLAR PANEL



Operation of an energiser with solar panel and battery

- The energiser can be operated during the day with sufficient sunlight via the solar panel
- Operation of the energiser at night via a connected 9 V battery
- Caution: The battery is not charged via the solar panel!























Operation of an energiser with solar panel and 12 V battery






- Operation of the energiser during the day with sufficient solar radiation via the solar panel and simultaneous charging of the connected 12 V battery
- Operation of the energiser at night via the connected 12 V battery

PRODUCT GUIDE

ENERGY SUPPLY

horizont recommends the following combinations or additions for an optimal solar solution:

Energiser	Energy		Solar panel	Accessories
	12 V battery	9 V battery		Solar bracket
 trapper® AN45 10867	 AGM battery 60 Ah 14548		 Solar panel 10 watts 14545	 Solar bracket with spiked post 14923
 trapper® AN80 10866	 AGM battery 60 Ah 14548		 Solar panel 10 watts 14545 Solar panel 20 watts 14536	 Solar bracket with spiked post 14923
 trapper® AN120 10865	 12 V special battery 100 Ah 14126		 Solar panel 20 watts 14536	 Solar bracket with spiked post 14923
 trapper® B12 / B22 10616 / 10620	 12 V Lead-fleece battery 12 Ah 15842	 9 V alkaline battery 120 Ah 15844E	 Solar panel 2 watts 60140VP	
 trapper® AB12 14497	 12 V Lead-fleece battery 12 Ah 15842	 6 V block battery 230502E	 Solar panel 2.5 watts 14541C	

Energiser	Energy		Solar panel	Accessories	
	12 V battery	9 V battery		Bracket	Portable / Vandal proof box
 <p>farmer® ABN30 10891</p>	 <p>12 V Lead-fleece battery 34 Ah 14501</p>	 <p>9 V alkaline battery 170 Ah 12012E</p>	 <p>Solar panel 5 watts 14499</p>		
 <p>farmer® AN100 10896</p>	 <p>Lead-fleece battery 55 Ah 14974 AGM battery 60 Ah 14548</p>		 <p>Solar panel 10 watts 14545 Solar panel 20 watts 14536</p>	 <p>Bracket 14143</p>	 <p>Portable / vandal proof boxes 14444 / 14129 / 14906</p>
 <p>farmer® AN300 10882</p>	 <p>12 V special battery 100 Ah 14126</p>		 <p>Solar panel 10 watts 14545 Solar panel 30 watts 14537</p>	 <p>Bracket 14143</p>	 <p>Portable / vandal proof boxes 14444 / 14129 / 14906</p>
 <p>farmer® AN1000 / AN1000Solar 10855 / 10856</p>	 <p>12 V AGM battery 60 Ah 14548 12 V Lead-fleece battery 75 Ah 14479</p>		 <p>Solar panel 10 watts 14545</p>		
 <p>hotshock® A300 10613</p>	 <p>12 V special battery 100 Ah 14126</p>		 <p>Solar panel 20 watts 14536 Solar panel 30 watts 14537</p>	 <p>Bracket 14143</p>	 <p>Vandal proof box 14444 / 14129 / 14906</p>
 <p>hotshock® ABN37 10892</p>	 <p>12 V Lead-fleece battery 34 Ah 14501</p>	 <p>9 V alkaline battery 170 Ah 12012E</p>	 <p>Solar panel 10 watts 14511</p>		

FURTHER PRODUCT RECOMMENDATIONS



horizont recommends the following combinations or additions for an optimal solar solution:

Energiser	Energy		Solar panel	Accessories	
	<i>12 V battery</i>	<i>9 V battery</i>		<i>Bracket</i>	<i>Portable / Vandal proof box</i>
 ranger® AN360 10997	 12 V special battery 100 Ah 14126		 Solar panel 30 watts 14537	 Bracket 14143	 Vandal proof box 14444 / 14129 / 14906
 ranger® AN490 10857	 12 V special battery 100 Ah 14126		 Solar panel 50 watts 14873	 Bracket 14143	 Vandal proof box 14444 / 14906
 ranger® ABN60 10983	 12 V Lead-fleece battery 34 Ah 14501	 9 V alkaline battery 170 Ah 12012E	 Solar panel 30 watts 14537		
 ranger® AN2000 / AN3000 10854 / 10992	 AGM battery 60 Ah 14548		 Solar panel 20 watts with bracket 14538		
	 12 V Lead-fleece battery 75 Ah 14479		 Solar panel 30 watts with bracket 14537		
 ranger® AN4800 10993	 AGM battery 95 Ah 14600		 Solar panel 30 watts 14537		
	 12 V Lead-fleece battery 75 Ah 14479		 Solar panel 50 watts 14873		
 turbomax® AN800 10749	 12 V Battery 230 Ah 25012B		 Solar panel 50 watts 14873	 Bracket 14143	 Battery box 21264

WELL ADVISED ON BATTERIES



- Large and small battery casings fit in all 9 V battery energisers.
- Alkaline batteries guarantee an optimal herding voltage and should be used for high capacity battery energisers.
- Furthermore, every horizon battery is mercury- and cadmium-free!
- Our product guide as of will help you choose the right battery.

9 V alkaline battery turbomax®

- Suitable for:** • All 9 V energisers
- Advantage:** • High voltage curve throughout the entire operating life ensures optimum energiser function
- Storage:** • Up to two years
- Disposal:** • Included in price



Art. No.	Designation	Power	Width	Height	Depth	Unit	EAN
14896E	turbomax® AB200	9 V / 200 Ah	12.5 cm	16.0 cm	19.0 cm	1	4 014803 148964
12012E	turbomax® AB170	9 V / 170 Ah	12.5 cm	16.0 cm	19.0 cm	1	4 014803 120120
12012PE	turbomax® AB170	9 V / 170 Ah	12.5 cm	16.0 cm	19.0 cm	45	4 014803 440617
14057E	turbomax® AB150	9 V / 150 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 140579
15844E	turbomax® AB120	9 V / 120 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 158444
15509E	turbomax® AB75	9 V / 75 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 155092
15848E	turbomax® AB55	9 V / 55 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 158482

DISTINGUISHED

The Danish magazine "Grene Kramp" took a close look at various manufacturers and checked the capacities of their batteries in a battery test. **The alkaline batteries of the turbomax® series from horizon have the best and clearest results in the conducted tests.**

9 V zinc-carbon battery ranger®

- Suitable for:** • 9 V battery energisers
- Advantage:** • Inexpensive alternative to the common alkaline battery
• Zinc-carbon batteries have a lower voltage curve throughout their entire operating life than alkaline batteries
- Storage:** • Up to two years
- Disposal:** • Included in price



Art. No.	Designation	Power	Width	Height	Depth	Unit	EAN
15004E	ranger® SB90	9 V / 90 Ah	12.5 cm	16.0 cm	19.0 cm	1	4 014803 150042
15034E	ranger® SB55	9 V / 55 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 150349

6 V block battery

- Suitable for:** • Energiser trapper AB12 (14497)
- Power:** • High load rating
- Storage:** • Up to two years
- Disposal:** • Included in price



Art. No.	Designation	Power	Width	Height	Depth	Unit	EAN
253967E	High-capacity battery	6 V / 7 Ah	6.5 cm	6.5 cm	11.0 cm	1	4 030163 537521
230502E	COMPACT	6 V / 50 Ah	6.5 cm	6.5 cm	11.0 cm	1	4 030163 551374



12 V Battery

- Suitable for:**
- All 12 V energisers
- Advantage:**
- Extremely low self-discharge
 - High cycle stability
 - Already filled with battery acid
- Charging:**
- To avoid damage, please charge only with recommended chargers

Art. No.	Power	Capacity	Width	Height	Depth	Weight (including acid)	Unit	EAN
14126	12 V / 100 Ah	C20	35.3 cm	17.5 cm	19.0 cm	22.2 kg	1	4 014803 141262
25012B	12 V / 230 Ah	C20	48.0 cm	27.0 cm	21.0 cm	62 kg	1	4 030163 534582

OPTIMISED CURRENT FLOW



Energisers need low current flows to function optimally. This is exactly the reason why common car starter batteries are not suitable for the operation of energisers, as they are designed for a particularly large current flow. As a result of the low current flow required by the energiser, car batteries would be subjected to high loads and their operating life shortened considerably. The 12 V special battery from horizon is designed for this low current flow and is therefore optimally suited for the power supply of energisers. It also guarantees an extremely long operating life.



12 V lead-fleece battery / AGM battery

- Suitable for:**
- Type 15842 and 12025: 9 V battery energisers
 - Type 14501: Energisers hotshock® ABN37 (10892), farmer® ABN30 (10891)
 - Type 14974: Energisers farmer® AN1000 (10855), ranger® AN2000 (10854), ranger® AN3000 (10992)
 - Type 14479: Energisers farmer® AN1000 (10855), ranger® AN2000 (10854), ranger® AN3000 (10992), ranger® AN4800 (10993)
- Advantage:**
- The horizon lead-fleece batteries have an extremely low self-discharge. When not in use, regular recharging of e.g. every 2 months is still recommended.
- Maintenance:**
- Maintenance-free
- Storage:**
- independent of location
- Charging:**
- To avoid damage, please charge only with recommended chargers (14864, 14863)
- Scope of delivery:**
- Connecting cable lead-fleece battery (90439C)

Art. No.	Designation	Design	Capacity	Width	Height	Depth	Weight	Unit	EAN
15842	12 V / 12 Ah	Lead-fleece	C20	15.0 cm	9.8 cm	9.5 cm	4.0 kg	1	4 014803 158420
12025	12 V / 27 Ah	Lead-fleece	C20	17.5 cm	16.6 cm	12.5 cm	9.4 kg	1	4 014803 120250
14501	12 V / 34 Ah	Lead-fleece	C20	19.5 cm	18.0 cm	13.0 cm	10.5 kg	1	4 014803 145017
14974	12 V / 55 Ah	Lead-fleece	C20	21.0 cm	10.0 cm	17.5 cm	13.8 kg	1	4 014803 149749
14479	12 V / 75 Ah	Lead-fleece	C20	26.0 cm	20.5 cm	17.0 cm	24.0 kg	1	4 014803 144799
14548	12 V / 60 Ah	AGM	C20	24.0 cm	20.0 cm	17.0 cm	18.0 kg	1	4 014803 467201
14549	12 V / 80 Ah	AGM	C20	31.0 cm	20.0 cm	17.5 cm	23.2 kg	1	4 014803 467218
14600	12 V / 95 Ah	AGM	C20	35.0 cm	19.0 cm	17.5 cm	26.0 kg	1	4 014803 467225

! Safe handling of 12 V batteries:
Please see the next page.

ADVANTAGES OF AGM BATTERIES:

- Long operating life and low self-discharge
- Maintenance-free (no refilling)
- Assembly possible in any position without leaking
- Excellent for hard-to-reach locations

SAFE HANDLING OF 12 V SPECIAL BATTERIES:



No smoking,
no open flames no sparks



Wear protective goggles



Sulphuric acid



Keep away from children



Observe
operating instructions



Explosive gaseous mixture

YOU WILL FIND DETAILED INFORMATION IN OUR SAFETY INSTRUCTIONS:

WWW.ANIMALCARE.HORIZONT.COM/SAFEHANDLING

Large capacity battery box

- Suitable for:**
- 12 V special battery 230 Ah (25012B)
- Advantage:**
- Can be locked with sufficient storage space for the energiser and battery
 - Protection against weather and theft

Art. No.	Unit	EAN
21264	1	



Battery connecting cable

- Suitable for:**
- Connection of 12 V batteries
 - Type 90501C: 9 V energisers to 12 V special 12 V batteries
 - Type 90439C: 9 V energises to lead-fleece batteries
 - Type 47BL1-2: energisers trapper® AN

Art. No.	Designation	Unit	EAN
90501C	for 12 V special rechargeable battery, crocodile clips	1	
47BL1-2	for trapper® AN energisers	1	
90439C	for lead-fleece battery	1	
47PLAS0237	Connection terminal, single, black	1	
47PLAS0235	Connection terminal, single, red	1	





Battery charging times:

15842	12 Ah	4 hrs.
12025	27 Ah	6.5 hrs.
14479	75 Ah	10 hrs.
14126	100 Ah	23 hrs.

Charger Charge Box 3.6 A

- Suitable for:**
- 12 V special batteries and lead-fleece batteries from 1.2 to 120 Ah
- Charging process:**
- Fully automatic and regulated
 - LED charge status display
 - Pulse/trickle/continuous charging
 - 230 V / 50 Hz operating voltage
- Protection:**
- Dust and splash-proof
- Scope of delivery:**
- Nylon bag
 - Adapter cables with battery clamps
 - Adapter cables with ring terminal end
 - Adapter cables with connector for cigarette lighter

Art. No.	Unit	EAN
14863	1	4 260173 030020



battery charging times:

15842	12 Ah	4 hrs.
12025	27 Ah	5 hrs.
14479	75 Ah	5 hrs.
14126	100 Ah	12 hrs.
25012B	230 Ah	29 hrs.

Charger Charge Box 3.5 - 7.0 A

- Suitable for:**
- 12 V special batteries and lead-fleece batteries from 14 to 230 Ah
- Charging process:**
- Fully automatic and regulated
 - LED charge status display
 - Pulse/trickle/continuous charging
 - 230 V / 50 Hz operating voltage
- Protection:**
- Protection against dust, splash water, overheating and reverse polarity
- Scope of delivery:**
- Nylon bag
 - Adapter cables with battery clamps
 - Adapter cables with ring terminal end
 - Adapter cables with connector for cigarette lighter

Art. No.	Unit	EAN
14864	1	4 260173 030037

FAST & GENTLE CHARGING

The charger Charge Box 3.5 - 7.0 A is particularly powerful. The charging process is extremely fast and yet gentle on the battery and charger, as the Charge Box itself selects the appropriate amperage when charging. Furthermore, two 12 volt batteries can be charged at the same time.

Power supply unit 230 V for energisers

- Suitable for:**
- Dual and combi energisers (see Art. No. bottom)



Figure as example, shows 47PSU0010EU

Art. No.	Designation	Unit	EAN
47PSU0008EU	trapper® AN: 10865, 10866, 10867	1	5 021385 008530
979211	farmer® AN (up to YOC 2013): 10637, 10636	1	4 014803 463784
47PSU-0010FEU	ranger® AN: 10993, 10992, 10854 farmer® AN: 10855, 10856 farmer® ABN30: 10891 hotshock® ABN37: 10892	1	5 021385 008592
47PSU0010EU	ranger® AN: 10857, 10997, 10858 farmer® AN: 10896, 10897, 10882	1	5 021385 008561



Portable box for 12 V energisers

- Suitable for:** • 100 Ah battery, solar panel bracket, energisers of the series: trapper®, farmer®, ranger®, hotshock® and turbomax®
- Application:** • Easy transport of the energiser and 12 V battery
- Material:** • 1.5 mm galvanised
- Accessories:** • Solar panel bracket (14143)

Art. No.	Length	Width	Height	Unit	EAN
14906	45.0 cm	45.0 cm	33.0 cm	1	4 014803 149060



Portable box for 12 V energisers

- Suitable for:** • Energisers of the series: trapper®, farmer®, ranger®, hotshock® and turbomax®
- 12 V batteries
- Application:** • Easy transport of the energiser and 12 V battery
- Material:** • Galvanized
- Accessories:** • Solar panel bracket (14143)

Art. No.	Length	Width	Height	Unit	EAN
14129	32.0 cm	30.0 cm	44.0 cm	1	4 014803 141293



Vandal proof box | electrifiable

- Suitable for:** • All AN energisers with an option for wall mounting
- Theft protection:** • Can be locked and is electrifiable
- An unauthorised person who touches the box will receive a deterring electric shock
- Only the owner of the vandal proof box can open the box with an insulated key
- Scope of delivery:** • Vandal proof box with two insulated keys and earth stake
- Accessories:** • Solar panels 10 to 50 watts
- Solar panel bracket (14143)

Art. No.	Length	Width	Height	Unit	EAN
14444	27.3 cm	44.5 cm	53.0 cm	1	4 014803 144447



LIGHT & HANDY: PLASTIC SOLAR PANELS



- Exclusively available at horizont: Light, sturdy, shatter-proof and powerful plastic solar panels
- For all battery energisers of all brands that have a solar charging regulator!
- Ground installation: with optional solar bracket
- Charge regulator: Not required; is installed in the recommended horizont energiser
- Solar panel material: monocrystalline

Lighter and easier to handle compared to panels of glass with aluminium frame. The aluminium frame can collide into something and vibrations can break the glass. Plastic is much more suitable for rough use in agriculture. The lightweight construction of the solar panel keeps the weight as low as possible.

Available in many sizes and designs!

Solar kit | 2 watt



- Suitable for:** • Energisers: trapper® B12 (10616), trapper® B22 (10620), older equiSTOP 9 V energisers
- Attachment:** • Solar kit is simply pushed onto the recessed grip of the energiser
- Scope of delivery:** • Complete with connecting cable (50 cm), aluminium frame and clip-on device
- Charge regulator:** • Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:** • Solar panel: monocrystalline, frame: Aluminium

Art. No.	Length	Width	Height	Unit	EAN
60140VP	31.0 cm	18.5 cm	2.5 cm	1	4 014803 005731

Solar kit | 2.5 watts **PLASTIC FRAME**



- Suitable for:** • Energiser trapper® AB12 (14497)
- Attachment:** • Solar kit is pushed onto the top of the housing
- Scope of delivery:** • Connecting cable (50 cm)
- Charge regulator:** • Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:** • Solar panel: monocrystalline
• Frame and swivelling bracket: Plastic

Art. No.	Length	Width	Height	Unit	EAN
14541C	25.5 cm	11 cm	1 cm	1	4 014803 145369

Solar kit | 5 and 10 watts **PLASTIC FRAME**




- Suitable for:** • Energisers: hotshock® ABN37 (10892), farmer® ABN30 (10891)
- Attachment:** • Solar kit is screwed in fixation points to the side of the energiser by means of an integrated bracket
- Scope of delivery:** • 40 cm cable length
- Charge regulator:** • Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:** • Solar panel: monocrystalline
• Plastic frame
- Scope of delivery:** • Solar panel with screws for fastening to energiser

Art. No.	Power	Length	Width	Height	Unit	EAN
14499	5 W	39.0 cm	26.5 cm	13.7 cm	1	4 014803 451576
14511	10 W	39.0 cm	26.5 cm	13.7 cm	1	4 014803 145116

Solar panel | 5 watts

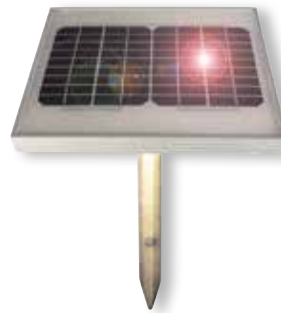
- Suitable for:**
- Older energisers farmer®/ranger® A2000, A3000
 - 12 V special rechargeable batteries up to 63 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Ground installation: with solar bracket (14923)
 - Installation on portable or vandal proof box: with solar bracket (14907 and 14192)
- Scope of delivery:**
- Connecting cable (2 m)
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:**
- Solar panel: monocrystalline, frame: Aluminium




Art. No.	Length	Width	Height	Unit	EAN
141451	25.5 cm	29.6 cm	2.5 cm	1	 4 014803 438249

Solar panel | 5 watts with bracket

- Suitable for:**
- Older energisers farmer®/ranger® A1000, A2000, A3000
 - Vandal proof box (14444)
 - 12 V special batteries up to 63 Ah
 - Portable box (14906) in conjunction with the attachment device (14156)
- Attachment:**
- Solar kit is simply pushed into the attachment device
- Scope of delivery:**
- connecting cable 40 cm, 2 flat plugs
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:**
- Solar panel: monocrystalline, frame: Aluminium




Art. No.	Length	Width	Height	Unit	EAN
14152	25.5 cm	29.6 cm	2.5 cm	1	 4 014803 141521

Solar panel | 10 watts **PLASTIC FRAME**

- Suitable for:**
- Energisers: trapper AN80, trapper AN120
 - 12 V batteries up to 85 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Ground installation: with solar bracket (14923)
 - Installation on portable or vandal proof box: with solar bracket (14143)
- Scope of delivery:**
- connecting cable (1.8 m), connection terminals
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:**
- Solar panel: monocrystalline, plastic frame




Art. No.	Length	Width	Height	Unit	EAN
14545	39.0 cm	29.6 cm	2.8 cm	1	 4 014803 476685



Solar panel | 10 watts with bracket PLASTIC FRAME


- Suitable for:**
- Energisers: farmer® AN1000
 - 12 V batteries up to 85 Ah
- Attachment:**
- Installation on the energiser: via pre-assembled solar bracket (14462)
 - Ground installation: with solar bracket (14923)
 - Installation on portable or vandal proof box: with solar bracket (14143)
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed
- Material:**
- Solar panel: monocrystalline
 - Plastic frame
- Scope of delivery:**
- Solar panel with bracket and screws for fastening to horizont energisers, connecting cable 40 cm, 2 flat plugs

Art. No.	Length	Width	Height	Unit	EAN
14546	39.0 cm	29.6 cm	2.8 cm	1	 4 014803 476692



Solar panel | 20 watts PLASTIC FRAME

- Suitable for:**
- Energisers: trapper® AN80 (10866), trapper® AN120 (10865), farmer® AN100 (10896), farmer® AN200 (10897), farmer® AN300 (10882), farmer® AN1000 (10855)
 - 12 V batteries from 85 to 100 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Ground installation: with solar bracket (14923)
 - Installation on portable or vandal proof box: with solar bracket (14143)
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser
- Material:**
- Solar panel: monocrystalline, plastic frame
- Scope of delivery:**
- 1x solar panel 20 watts with plastic frame, 1x connecting cable (1.8 m) with flat plugs 6.3 mm crocodile clips

Art. No.	Length	Width	Height	Unit	EAN
14536	45.5 cm	39.0 cm	2.8 cm	1	 4 014803 466334

LIGHT AND UNBREAKABLE

These solar panels are particularly lightweight and shatter-proof. The plastic frame with rounded corners and the solar cells made of plastic are extremely impact resistant.



Solar panel | 20 watts with bracket PLASTIC FRAME

- Suitable for:**
- Energisers: trapper® AN80 (10866), trapper® AN120 (10865)
 - 12 V batteries from 85 to 100 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Installation on portable or vandal proof box: with solar bracket (14143)
 - 40 cm cable length
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizont energiser
- Material:**
- Solar panel: monocrystalline
 - Plastic frame
- Scope of delivery:**
- 1x solar panel 20 watts with plastic frame and bracket, connecting cable 40 cm, 2 flat plugs, 6.3 mm crocodile clips

Art. No.	Length	Width	Height	Unit	EAN
14538	45.5 cm	39.0 cm	2.8 cm	1	 4 014803 466358

Solar panel | 30 watts

PLASTIC FRAME

- Suitable for:**
- Energisers: farmer® AN200 (10855), farmer® AN300 (10882), hotshock® A300 (10892), ranger® AN360 (10997), ranger® AN2000 (10854), ranger® AN3000 (10992), ranger® AN4800 (10993)
 - 12 V batteries with 100 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Ground installation: with solar bracket (14923)
 - Installation on portable or vandal proof box: with solar bracket (14143)
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizon energiser
- Material:**
- Solar panel: monocrystalline, plastic frame
- Scope of delivery:**
- 1x solar panel with plastic frame, 1x connecting cable (1.8 m) with flat plugs 6.3 mm crocodile clips



LIGHT AND UNBREAKABLE

These solar panels are particularly lightweight and shatter-proof. The plastic frame with rounded corners and the solar cells made of plastic are extremely impact resistant.

Art. No.	Length	Width	Height	Unit	EAN
14537	57.5 cm	39.0 cm	2.8 cm	1	4 014803 466341

Solar panel | 30 watts with bracket

PLASTIC FRAME

- Suitable for:**
- Energisers: farmer® AN200 (10855), farmer® AN300 (10882), hotshock® A300 (10892), ranger® AN360 (10997), ranger® AN2000 (10854), ranger® AN3000 (10992), ranger® AN4800 (10993)
 - 12 V batteries with 100 Ah
- Attachment:**
- Installation on the energiser: with solar bracket (14462)
 - Installation on portable or vandal proof box: with solar bracket (14143)
- Charge regulator:**
- Not required, as the charge regulator is installed in the recommended horizon energiser
- Material:**
- Solar panel: monocrystalline, plastic frame
- Scope of delivery:**
- 1 x solar panel with plastic frame and bracket, connecting cable 40 cm, 2 flat plugs



Art. No.	Length	Width	Height	Unit	EAN
14539	57.5 cm	39.0 cm	2.8 cm	1	4 014803 466365

Solar panel | 50 watts

- Suitable for:**
- Energisers: turbomax® AN800 (10749), hotshock® A300 (10613), ranger® AN490 (10857), ranger® AN4800 (10993)
 - Lead-fleece batteries up to 100 Ah
 - 12 V special battery up to 230 Ah
- Attachment:**
- Installation on e.g. wooden posts (14131): 2 x solar bracket (14143)
- Charge regulator:**
- Yes
- Material:**
- Solar panel: monocrystalline, frame: Aluminium
- Scope of delivery:**
- Complete with connecting cable, aluminium frame and charge regulator



HIGH EFFICIENCY, NO OVERCHARGING

The particularly powerful 50-watt solar panel has a directly integrated and practical charge regulator. This special advantage protects the battery whilst charging by solar energy. Overcharging is not possible thanks to the charge regulator. In addition to its high efficiency, the solar panel also features efficient solar cells. There is no danger of injury from sharp-edged corners, these are protected by plastic covers.

Art. No.	Length	Width	Height	Unit	EAN
14873	55 cm	52 cm	2.5 cm	1	4 014803 148735



Solar bracket with spoked post

- Suitable for:**
- 5 W solar panel (141451)
 - 10 W solar panel (14545)
 - 20 W solar panel (14536)
 - 30 W solar panel (14537)
- Attachment:**
- Fasten the retaining plate to the solar panel and metal rod with tread
 - Solar panel with the spoked post can be easily set up next to the energiser
- Material:**
- Post: galvanized iron
 - Retaining plate: Aluminium
- Length:**
- 62 cm

Art. No.	Unit	EAN
14923	1	4 014803 149237



Solar bracket

- Suitable for:**
- Electrifiable vandal proof box (14444)
 - Portable box (14906)
 - 5 W solar panel (141451)
 - 10 W solar panel (14545)
 - 20 W solar panel (14536)
 - 30 W solar panel (14537)
 - 50 W solar panel (14873)
- Inclination:**
- Inclination angle adjustable from 15 to 75 degrees
- Scope of delivery:**
- With mounting screws
- Material:**
- Aluminium

Art. No.	Unit	EAN
14143	1	4 014803 141439



Solar bracket

- Suitable for:**
- 5 W solar panel (141451)
 - 10 W solar panel (14545)
 - 20 W solar panel (14536)
 - 20 W solar panel (14538)
 - 30 W solar panel (14537)
 - 30 W solar panel (14539)
 - Energisers: farmer® AN100 (10855), ranger® AN2000 (10854)
- Attachment:**
- Simply fasten to the mounting points of the energiser and solar panel
- Material:**
- Aluminium, powder coated

Art. No.	Unit	EAN
14462	1	4 014803 144621



Solar bracket attachment device

- Suitable for:**
- Solar bracket with short spiked post 14907
 - Electrifiable vandal proof box (14444)
 - Portable box (14906)
- Attachment:**
- Simply screw on to the bracket, vandal proof box or portable box and attach the solar panel
- Material:**
- Iron, powder coated



Art. No.	Unit	EAN
14156	1	4 014803 141569

Solar bracket with short spiked post

- Suitable for:**
- 5 W solar panel (141451)
 - 10 W solar panel (14545)
 - 20 W solar panel (14536)
 - 30 W solar panel (14537)
- Attachment:**
- Fasten the retaining plate to the solar panel
 - The holder can be used for attachment to the attachment device (14156 or 14192)
- Material:**
- Post: Iron, galvanized
 - Retaining plate: Aluminium



Art. No.	Unit	EAN
14907	1	4 014803 149077

Solar bracket

- Suitable for:**
- Bracket (14907)
 - Older energisers: farmer® A1000, ranger® A3000
- Attachment:**
- Screw on bracket and attach the solar panel
- Material:**
- Iron, powder coated



Art. No.	Unit	EAN
14192	1	4 014803 141927



horizon

horizon

hotshock
ABN37





04

Earthing & control

The function of the electric fence is achieved through the deterrent effect of electrical impulses. The electric fence itself only represents a minor mechanical barrier. It is therefore very important to check the fence to ensure the function and the safety of the electric fence. Although it is an inconspicuous element, earthing is very important in the electric fence system. Only correct earthing guarantees optimum herding security.

- 80 | Guide
- 82 | Earth stakes
- 83 | Earth cable
- 83 | Warning signs
- 84 | Connecting cable
- 86 | Fence tester
- 88 | Lightning protection and fence switch
- 89 | FenceAlarm

THINGS TO KNOW ABOUT

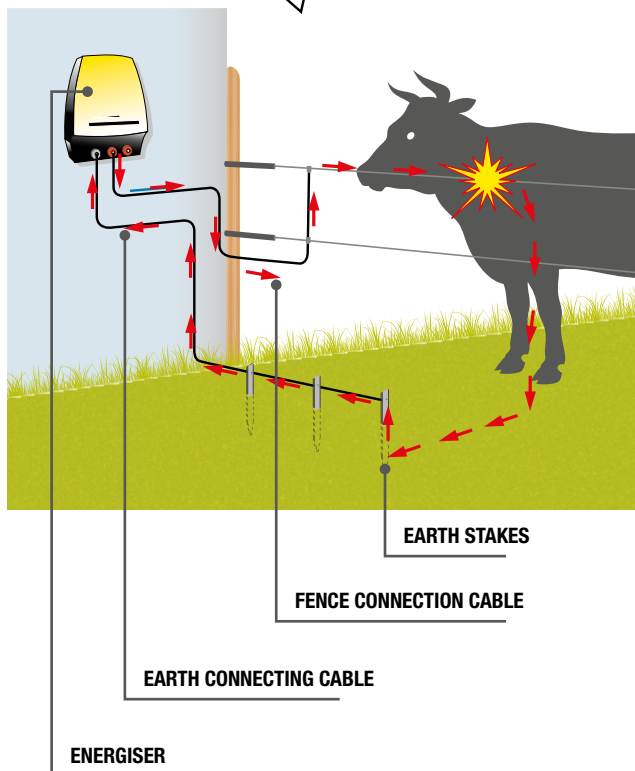
EARTHING & CONTROL

1. WHY IS EARTHING AT THE FENCE SO IMPORTANT?

The most important prerequisite to ensure optimum herding security as well as full energiser performance at the fence is proper earthing. The fence system is a circuit in which electricity flows.

CAUTION: It is not necessary to set up the fence in a circle to close the circuit because it is closed when touched by the animal. The current thus flows from the energiser through the conductors, the animal body (or vegetation) over the ground, through the earth stakes back to the energiser. Insufficient earthing means that less current flows and the deterrent effect on the animal is reduced. The danger: The animal escapes or enters the fenced area.

Closing the electric circuit with correct earthing



TIP: FAULT DETECTION

Connect long supply lines from the energiser to the fence in a branching box every 50-100 m. This can be easily opened and the cables checked for function by measuring the voltage. Troubleshooting is significantly simplified, especially for cables laid in the ground.

2. WHAT IS IMPORTANT TO PAY ATTENTION TO IN TERMS OF SOIL CONDITIONS?

Soil can have a very high resistance and significantly affect the herding security of the electric fence system. The goal is to minimise soil resistance, and this is achieved by good soil conductivity. Damp soil with good turf favours conductivity, while dry soil with little grass cover makes good earthing difficult. Difficult weather conditions, such as a layer of snow and frost, can also severely affect the earthing. If the ground is sandy, we recommend using an open or uninsulated earth conductor and earthing it at regular intervals. The more poorly the soil conducts, the more earth stakes should be used.

3. HOW DOES ONE EARTH AN ELECTRIC FENCE PROPERLY?

One or several earth stakes are inserted at least 1 m deep into the soil until they reach damp earth. When using several earth stakes, space them 3 m apart. The earth stakes are then connected to the energiser using high voltage cables and connecting cables. The number and depth of the earth stakes is crucial: The more and the deeper, the better.

CAUTION: Only use galvanised, rust-free materials for earthing, as a layer of rust will greatly impair the effect.



EARTHING CHECKLIST

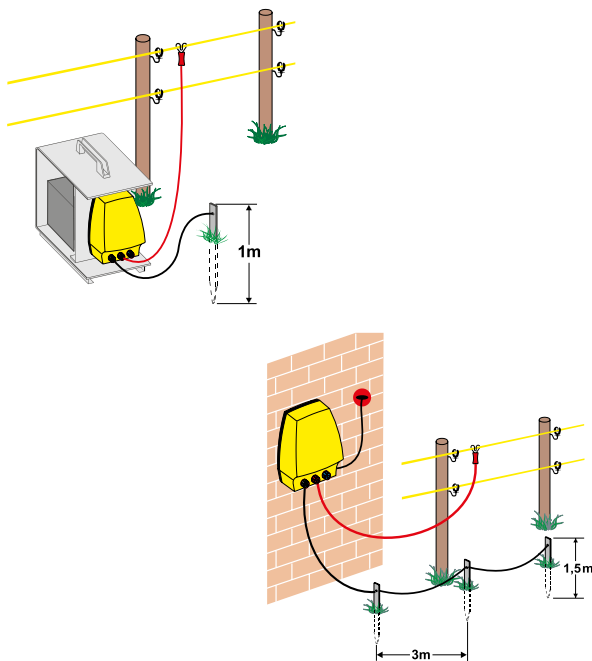
- ✓ Energiser
- ✓ Earth stake
- ✓ Earth connecting cable & connection cable
- ✓ Fence tester

4. WHEN AND HOW IS EARTHING CHECKED?

Earthing reliability should be checked when the pasture is put to use in the spring and during the dry period in the summer. Also in the event of faults in the fence as well as after installation of a new energiser.

Certain measuring instruments or fence testers are used for this purpose. The test procedure is as follows: You produce a short circuit by placing iron posts against the electrical conductor about 100 m away from the energiser. Ensure good contact with the conductor and drive the post at least 30 cm into the soil. The fence voltage should now drop to 2000 V (1000 V for dry soil).

The earthing rod of the voltmeter is inserted into the soil about 1 m from the last earth rod of the energiser, and the measuring contact is held to the last earthing rod of the energiser. The value should be under 1000 V. Note: The smaller the value, the better. You should always check your fence system daily and look after your animals. Written documentation helps to prove that you checked.

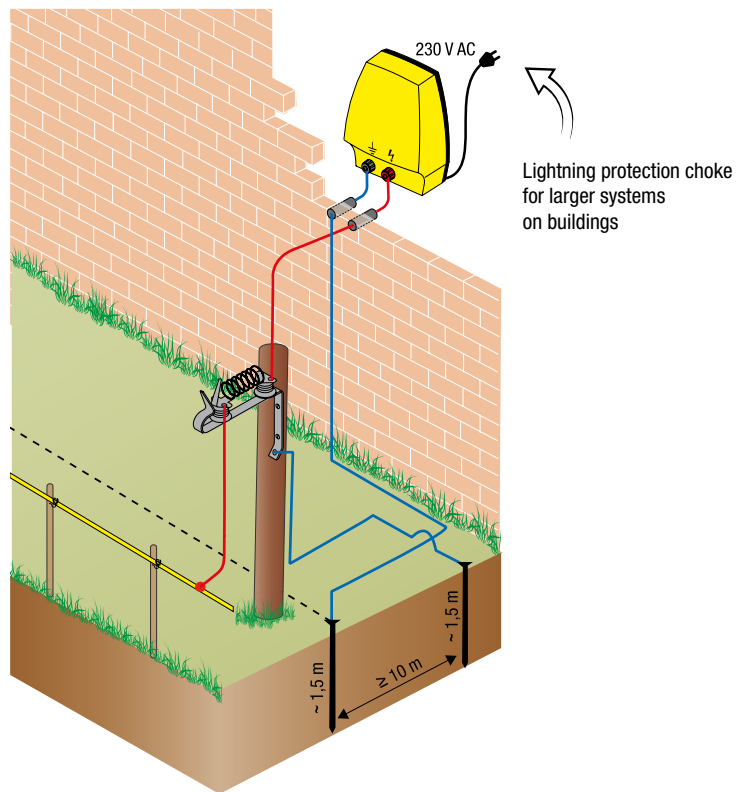


5. WHICH SAFETY REGULATIONS MUST BE OBSERVED?

When earthing the energiser, a minimum distance of 10 m to other earthing systems (e.g. building earthing) must be maintained to prevent the voltage from flashing over (e.g. in the event of a lightning strike). This safety distance is important to avoid endangering the house earthing including water and power lines. The distance between the earthing of the energiser and the lightning protection should also be at least 10 m.

Excessive voltage (like a lightning strike) can destroy the energiser, the fence is no longer functional and the animal can escape. To prevent this, a lightning protection system should be installed between the energiser and the fence system. This is a requirement inside the building. It is considered a recommendation for installation outside buildings. It is particularly useful when using a mains energiser, as the current can flash over to the mains.

A so-called lightning protection choke effectively protects the energiser against damage caused by lightning and excessive voltages.



Important icons for this chapter:

Product describing icons:

These icons describe earthing & control features.



Height



Width



Diameter



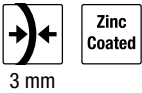
Material thickness



Stainless steel



Galvanized



Large contact surface to the ground ensures more efficient earthing



15017-1 14041-1

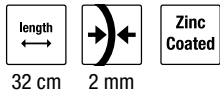
T-earth stake

- Suitable for:** • 12 V Battery and mains energisers
- Length:** • 150 cm
- Material:** • Angle section, galvanized
- Material thickness:** • 3 mm
- Scope of delivery:** • Complete with connection bolt

Art. No.	Unit	EAN
15017-1	1	4 014803 434272

- Suitable for:** • 12 V Battery and mains energisers
- Length:** • 100 cm
- Material:** • Angle section, galvanized
- Material thickness:** • 3 mm
- Scope of delivery:** • Complete with connection bolt

Art. No.	Unit	EAN
14041-1	1	4 014803 434265



Earth stake and spiked post with bracket

- Suitable for:** • horizont battery energisers as of YOC 1981:
Currently: (10285), (10555), (10841), (10616), (10620)
- Length:** • 32 cm
- Material:** • Galvanized
- Material thickness:** • 2 mm
- Scope of delivery:** • Complete with connection bolt

Art. No.	Design	Unit	EAN
88178	Earth stake with bracket	1	4 014803 881786
80054	Earth stake, single	1	4 014803 882370



Earth stake and spiked post

- Suitable for:** • 9 V battery energisers
- Advantage:** • To mount, a hole must be drilled into the battery box to screw the earth stake firmly to the energiser
- Length:** • 25 cm

Art. No.	Unit	EAN
14178	1	4 014803 141781

Flexible gate / fence / earth cable

- Application:** • Overhead and buried fence supply cables, connection of earthing rods and for power supply at gates
- Advantage:** • Double insulated
• Copper conductor
• Electric strength is at < 20,000 V
• 14523: Including eyes for connection

Art. No.	Reel	Diameter	max. supply cable length	Resistance	Unit	EAN
14523U	8 m	1.6 mm	8 m	0.01 Ω/m	1	4 014803 453440
14524	50 m	1.6 mm	500 m	0.01 Ω/m	1	4 014803 145246



Earth / Connecting / Supply cable

- Application:** • Overhead and buried fence supply cables, connection of earthing rods and for power supply at gates
- Advantage:** • Double insulated
• Conductor of galvanized steel wire
• Electric strength is at < 20,000 V

Art. No.	Reel	Diameter	max. supply cable length	Resistance	Unit	EAN
15321	10 m	1.6 mm	500 m	0.07 Ω/m	1	4 014803 153210
14040	25 m	1.6 mm	500 m	0.07 Ω/m	1	4 014803 140401
15525	50 m	1.6 mm	500 m	0.07 Ω/m	1	4 014803 155252
15956	100 m	1.6 mm	500 m	0.07 Ω/m	1	4 014803 159564
15516	100 m	2.5 mm	1,000 m	0.035 Ω/m	1	4 014803 155160



TIP

To protect the earth cable, it is advisable to lay it in a protective hose or pipe.

Warning sign international

- Dimensions:** • 20 x 10 cm
- Scope of delivery:** • Warning sign printed on both sides

Art. No.	Unit	EAN
14723	1	4 014803 147233



Warning sign international

- Dimensions:** • 20 x 10 cm
- Scope of delivery:** • Warning sign printed on both sides

Art. No.	Unit	EAN
14127	4	4 014803 141279





Zinc Coated



Fence connection kit

- Suitable for:** • Heart clamp for connection to tape up to 12 mm, rope, polywire and wire
- Advantage:** • High voltage cable of the heart clamp with reinforced plastic sheath to avoid voltage flashovers
- Material:** • Galvanized
- Scope of delivery:** • Connecting cable 120 cm, earth cable 50 cm

Art. No.	Unit	EAN
15522C	1	4 014803 405784



length
←→
100 cm

Zinc Coated



Fence connection terminal

- Suitable for:** • Connection between energiser and fence material from tape up to 40 mm, rope, polywire and wire
- Advantage:** • High voltage cable with reinforced plastic sheath
• Safe contact especially with higher energies
- Cable length:** • 120 cm
- Material:** • Galvanized

Art. No.	Unit	EAN
10286C	1	4 014803 405500

length
←→
150 cm

Stainless Steel



Fence connection kit

- Suitable for:** • Crocodile clips for connection to tape up to 40 mm, rope, polywire and wire
- Advantage:** • Connecting cable equipped with reinforced plastic sheath to prevent voltage flashover
- Cable length:** • 150 cm
- Material:** • Stainless steel
- Scope of delivery:** • Connecting cable with eyelets, crocodile clips

Art. No.	Unit	EAN
14879C	Fence connection kit 1	4 014803 148797

Energiser and earth connection kit

- Suitable for:**
- Heart clamp for connection to tape up to 12 mm, rope, polywire and wire
 - Earth connecting cable for fastening to earthing rod
- Advantage:**
- High voltage cable with reinforced plastic sheath
- Material:**
- Galvanized
- Scope of delivery:**
- Earthing rod, fence connection cable 2 m, earth connecting cable 3 m, Warning sign



Zinc Coated

Art. No.	Unit	EAN
15858C	1	4 014803 158581

Earth connecting cable complete with screw

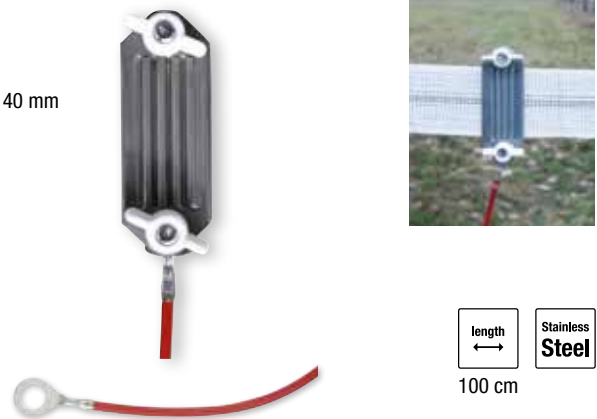
- Suitable for:**
- Connection between earthing rod and energiser
- Advantage:**
- High voltage cables with double insulation
 - Complete with connection bolt
- Cable length:**
- 90 cm
- Material:**
- Stainless steel



Art. No.	Unit	EAN
90150C	1	4 014803 005793

Fence connection terminal

- Suitable for:**
- Connection between energiser and fence material from tape up to 40 mm
- Advantage:**
- High voltage cable with reinforced plastic sheath
 - For safe contact especially with higher energies
- Cable length:**
- 120 cm
- Material:**
- Stainless steel



length 100 cm
Stainless Steel

Art. No.	Unit	EAN
10447C	1	4 014803 405579

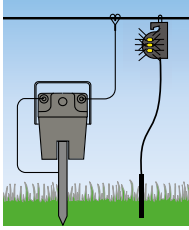
Fence connection terminal

- Suitable for:**
- Connection between energiser and fence material from rope up to 6 mm
- Advantage:**
- High voltage cable with reinforced plastic sheath
 - For safe contact especially with higher energies
- Cable length:**
- 100 cm



length 70 cm
Stainless Steel

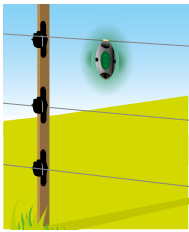
Art. No.	Material	Unit	EAN
10593C	galvanized	1	4 014803 105936



Fence tester Isotester 6000

- Advantage:**
- Simple and quick control of the fence system
 - Fence voltage display in 3 stages: 2,000 V, 4,000 V and 6,000 V
- Operation:**
- Without battery
- Scope of delivery:**
- Fence tester

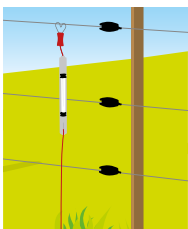
Art. No.	Unit	EAN
14082C	1	4 014803 428684



Fence tester Flash 2000

- Advantage:**
- Optical function display in twilight and darkness
 - The device lights up in time with the current pulses and goes out under 2,000 V fence voltage
 - The measuring device does not require an earth terminal (is simply clipped into the existing fence material)
 - Additional deterrent for wildlife fences
- Operation:**
- Battery operation
- Scope of delivery:**
- Fence tester, 3 V lithium battery CR2032

Art. No.	Unit	EAN
14149C	1	4 014803 141491



Fence tester Neonlight

- Advantage:**
- Optical function display in twilight and darkness
 - In the design of a neon lamp with LEDs
 - The device flashes in sync with the current pulses and goes out under 2,000 V fence voltage
 - Additional deterrent for wildlife fences
- Operation:**
- Without battery
- Scope of delivery:**
- Fence tester

Art. No.	Unit	EAN
10424C	1	4 014803 405548

NEW Fence tester *trapper*[®]

- Advantage:**
- 6 recessed glow lamps for easy reading of voltage
 - Non-slip insulation of the earth stake - additional safety in operation
 - When not in use, the cable can be wrapped around the fence tester and the earthing rod can be fixed in place - easy handling and additional protection against damage
- Operation:**
- Operation without battery!
- Scope of delivery:**
- Fence tester

Art. No.	Unit	EAN
14494C	1	4 014803 144942



Fence tester *farmer*[®]

- Advantage:**
- 10 recessed LEDs – very good legibility even with strong light incidence
 - Recessed pushbutton prevents unintentional operation
 - Does not require earthing via an earthing cable
 - Battery control indicator
- Operation:**
- Battery operation (2* CR2016 3V lithium battery)
- Scope of delivery:**
- Fence tester and 2 batteries

Art. No.	Unit	EAN
14527C	1	4 014803 476562



Fence tester *ranger*[®]

- Advantage:**
- Digital display for accurate reading of the voltage
 - Device switches on automatically when fence voltage is applied
 - Non-slip insulation of the earth stake enables safe operation
 - Cable can be wrapped around the fence tester when not in use – easy handling and additional protection against damage
- Operation:**
- Battery operation
- Scope of delivery:**
- Fence tester, battery

Art. No.	Unit	EAN
14496C	1	4 014803 144966

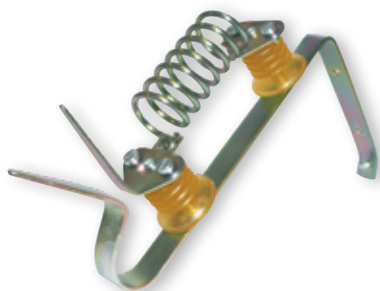


Fence tester *turbomax*[®] Fence *scout*

- Advantage:**
- Measuring device for fence voltage, amperage and as fault finder
 - Measuring range up to 10,000 V
 - Display of current flow direction
 - Direction display of the fault
 - Display lighting
 - Acoustic signals
 - With battery control indicator
- Operation:**
- Battery operation
- Scope of delivery:**
- Fence tester, 9 V block battery, belt pouch

Art. No.	Unit	EAN
14151C	1	4 014803 141514





Lightning protection choke

- Suitable for:** • Electric fence installation on building installations
- Advantage:** • Effectively protects energiser from damage caused by lightning and excessive voltage

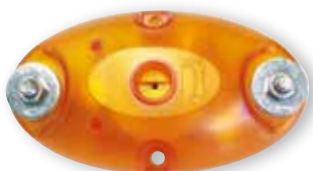
Art. No.	Unit	EAN
15482		4 014803 154828

DOUBLE LIGHTENING PROTECTION



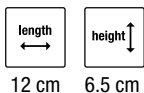
Energisers with two fence terminals also require two lightning protection systems.

Safety advice: To prevent lightning damage, an earthed lightning spark gap must be installed in the fence supply cable to the building, or prior to entry into a building. The lightning protection device must be installed by a specialist if the energiser is installed inside the building. The wiring must be carried out by a specialist according to the installation instructions. Do not combine lightning protection earth and operational earth of the electric fence system.

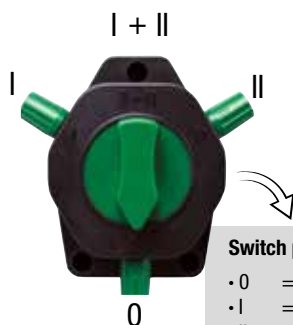


Lightning protection device

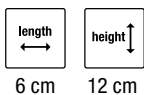
- Suitable for:** • Mobile battery and 12 V Battery energisers < 1 J
- Advantage:** • Can be mounted to wall or on fence
- Dimensions:** • 12 x 6.5 cm



Art. No.	Unit	EAN
14085C	1	4 014803 428707



- Switch positions:**
- 0 = Off
 - I = Fence system 1
 - II = Fence system 2
 - I+II = Fence system 1 and 2



Fence switch

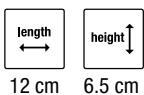
- Suitable for:** • Switching power on and off
- Advantage:** • Two terminals can be switched
- Can be used independently of the energiser
- Dimensions:** • 6 x 12 cm

Art. No.	Unit	EAN
14865C	1	4 014803 148650



On/Off switch

- Suitable for:** • Switching power on and off
- Advantage:** • A fence system or individual fence sections can be switched
- Can be used independently of the energiser
- Dimensions:** • 12 x 6.5 cm



Art. No.	Unit	EAN
14084C	1	4 014803 428691

LUDA FenceAlarm

- Advantage:**
- Fence monitoring by mobile phone, saves up to 50 working hours per year
 - Fence voltage monitoring with alarm function
 - Can be integrated anywhere in the fence system
 - Can be used regardless of location, with sufficient GSM network coverage
 - Free download of My.Luda.Farm app for monitoring
 - Integrated, 12 V battery
- Operation:**
- Scope of delivery:**
- Luda.FenceAlarm fence sensor, outdoor charger 220 V, earthing rod, outdoor charging cable 12 V, fence and earthing terminal, installed SIM card



Art. No.	Unit	EAN
38LUD1072	1	7 350030 453790

Range of functions	Free	Alarm+
Automatic alarms	-	✓
Unlimited alarm receivers	-	✓
Fence Voltage Graph™ fence voltage chart ¹	-	30 days
Frequency of status update	Every 48 hours ²	When voltage changes ³
Low battery level alarm	✓	✓
Price	0 €	60 €/year ⁴

TIP

Use all functions in the My.Luda.Farm app!



LUDA solar panel for FenceAlarm / 3 W

- Suitable for:**
- Luda FenceAlarm (38LUD1072)
- Advantage:**
- Charges the Luda FenceAlarm within one sunny day
 - Luda FenceAlarm no longer needs to be removed for charging
 - Sturdy frame and bracket
 - Lightweight construction of solar panel and frame of plastic material
 - Monocrystalline solar panels
 - With swivel joint for ideal alignment to the sun
 - **Alarm Plus function free for the first year!**



Art. No.	Unit	EAN
38LUD1085	1	7 350030 454551

LUDA SmartPlug

- Advantage:**
- Switching electrical devices on and off via app (e.g. 230 V energisers)
 - Safety and control
 - Save working time and electricity costs
 - Measure power consumption
 - Measure temperature
 - Easy installation
- Operation:**
- Mains connection



Art. No.	Unit	EAN
38LUD1071	1	7 350030 453783





05

Netting

The construction of complete fences is greatly simplified with the use of netting. Posts, connectors and polywires are already installed in each net section. In addition, each net offers practical protection against predators and external intruders.

92 | Guide

94 | Product guide

96 | Sheep and goat netting

102 | Wolf deterrent netting

108 | Poultry netting

110 | Gate for electric fence netting

111 | Small animal netting

112 | Boundary nets and barrier fences

113 | Repair kits | Accessories

THINGS TO KNOW ABOUT

NETTING



The horizon service for you:
Two year warranty on the UV stability of all netting.

1. THE FUNCTION OF NETTING

Netting consists of horizontal and vertical polywires. These polywires are made of monofilament plastic threads and the current-carrying polywires are additionally made of wires. A quality feature here is the number and thickness of the wires. With regard to plastic monofilaments, resistance to sunlight and mechanical strength also play a special role. Horizontal plastic monofilaments are therefore made of high-quality polyethylene (PE for short) with an additive for UV stabilization.

Special reinforcements of the vertical polywires, the plastic struts, can further increase the stability of the netting (for specific applications under increased weather conditions, such as wind and snow loads, as well as in uneven terrain). Various posts with different heights and thickness are also available to ensure optimal vertical fixing of the netting. There are various types of netting, depending on the application, which differ in the spacing between the polywires and the number and arrangement of the current-carrying polywires.

2. THE APPLICATION

As a livestock owner you can keep your animals in or out with a electric fence or an electric net. Animals that have a dense coat or plumage, such as poultry, sheep and goats, are ideally guarded with an electric net. Due to their size, small animals such as cats, dogs or rabbits can also be managed with netting. The same rule can also be applied when warding off wildlife or wolves. In this case, the horizon range offers optimal netting and polywire fencing solutions. The different types of netting are classified according to the different animal species into sheep/goat, poultry and small animal nets (rabbits, cats).

THE CONDUCTIVITY

The required herding pulse energy can be achieved through high electrical conductivity (of the polywires or wires). Each horizon netting type contains information on conductivity, e.g. the symbol A++, which stands for the highest conductivity.



When using netting on particularly dry soil, it is advisable to use netting with earth conductors. If the netting is touched by the animal in this case, the dry soil prevents the necessary transport of electrical pulse energy back to the earth connection of the energiser. The earth conductor of the corresponding netting

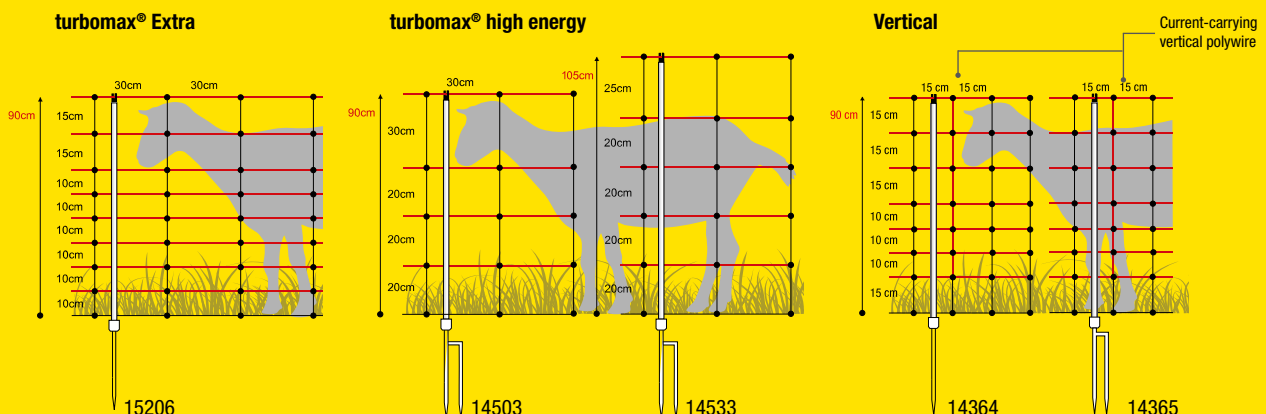
can act as a substitute and feed the pulse back to the energiser. Netting with earthing conductors can be used in all soil conditions. Particular strengths of the netting are in dry soils and earthing problems.

THE VEGETATION SITUATION

Vegetation at the site of use also plays a large role when choosing the appropriate netting. For example, an increased ground clearance of the lower current-carrying polywire (see turbomax® high energy 14503, 14533 below) or a certain number and arrangement of the current-carrying vertical polywires (see vertical netting 14364, 14365 below) can considerably reduce energy leakage into the ground that is unused for the herding performance. The pulse-type energy of the energiser is available in the optimum intensity required for herding security when the animal comes into contact with the netting. If one of the bottom polywires is covered with vegetation (see turbomax® Extra 15206 below), the leakage can have a negative effect on the herding performance.

TIP

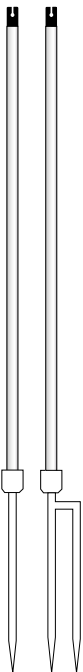
There should be no vegetation under the netting; vegetation should be removed before installation. Depending on the netting, the bottom current-carrying conductor is 5, 10 or 20 cm from the ground. This important conductor is therefore so close to the ground or vegetation as no other electric fence.





3. CHOOSING THE CORRECT POSTS

The posts can be selected according to soil conditions and preferences (single or double prong).



SINGLE PRONG

- Use on stony ground or in the mountains

DOUBLE PRONG

- Use on loose or firm stone-free ground
- The post can be anchored in the ground without tools thanks to the tread
- A double prong achieves a greater stability

The horizon posts are particularly stable. The post material is specifically optimised for multiple tensile loads that occur when pulling out net posts. The high strength and adapted elasticity, as well as the special connection technology of the post with the earth spikes, ensure a particularly long durability compared to conventional posts in mobile use.

The polywire insulator at ground level, which is located on the post-earth spike, ensures close contact with the spike. It therefore supports the conductivity of a net with an electrical earth wire. Using additional posts to press down the bottom wire strand in uneven soil conditions helps avoid an electrical connection of the live polywires. This also eliminates possible gaps which wild animals can use to slip through, for example.

4. CONNECTION TO AN ENERGISER

horizont offers special energisers for the herding of animals with an insulating coat of wool, hair or feathers. Since the netting is often set up well inside the vegetation, horizont energisers are designed for exactly such conditions.

5. THE ASSEMBLY AND DISMANTLING OF NETTING

CUTTING THE PASTURE AREA FREE

Why is it so important for the netting to have the pasture area cut free? The trimmed corridor under the set up netting prevents the first current-carrying polywire from being overgrown through vegetation. The vegetation cannot conduct energy away from the netting into the ground. If the first current-carrying polywires are free from vegetation, no energy will be lost from the fence.

POSTS

How do I choose the optimal post? The broader surface of posts with double prong makes it easier to drive them into the ground. Yet the double prong is difficult to drive into stony ground. It is better to use a single prong here.

CORNER WITH POST

How does a corner solution work for the sheep net fence with additional posts? The additional post for the sheep net is necessary if there is no built-in post available in the corner. A "standard" plastic post can be used there, for example.

CONNECTING SHEEP NETTING

How is a net overlap created in sheep netting? This is attached at points where the nets meet. This means the netting is properly stretched in parallel at this point in the resulting length. It is important that the designated cable ends of the netting is connected conductively.

CONNECTING SHEEP NETTING CONDUCTIVELY TOGETHER

How is the netting conductively connected at the two starting points? Both of the cable ends of the netting are properly staked around the posts to eliminate unnecessary protrusion. Both clips of the ends are then connected without tools to establish a clean electrical contact on the fence.

SECURING SHEEP

How to deal with gaps between the netting and the ground due to ground depressions? Lambs or even sheep could slip under the fence here. It is therefore important to check the sheep net fence! The netting can be stretched on the ground with the supplied stakes. This guarantees better herding security.

CONNECTING THE ENERGISER

The energiser should be connected to the connecting clips of the netting. This enables the best contact performance.






























































ROLLING UP SHEEP NETTING

The netting is picked up at the posts. The actual netting (wire strand) is then rolled up to the posts. The netting is tied together with the strings.

PRODUCT GUIDE



















NETTING

SHEEP & GOAT NETTING

Page	Art.No.	Colour & Name	Netting height cm	Prong	Conductivity Ω / m		Earth conductor	 suitable for wildlife deterrent
97	15464	 horinetz	90	Single		1.15		
97	15465	 horinetz	90	Double		1.15		
97	15471	 horinetz	105	Single		1.01		
97	15472	 horinetz	105	Double		1.01		
97	14147	 horinetz	120	Double		0.84		
97	14543	 horinetz	120	Double		0.84	Yes	
98	14590	 horinetz high energy	90	Double		0.1		
98	14591	 horinetz high energy	90	Single		0.1		
98	14592	 horinetz high energy	90	Double		0.1	Yes	
98	14593	 horinetz high energy	105	Double		0.1		
98	14594	 horinetz high energy	105	Double		0.1	Yes	
98	14595	 horinetz high energy	120	Double		0.1		
93	15206	 turbomax® Extra	90	Single		0.29		conditional
99	15219	 turbomax® Extra	90	Double		0.29		conditional
99	15207	 turbomax® Extra	105	Single		0.28		conditional
99	15221	 turbomax® Extra	105	Double		0.28		conditional
100	14955	 turbomax® Plus	90	Single		0.33		conditional
101	14364	 Vertical	90	Single		0.17		excellent
101	14365	 Vertical	90	Double		0.17		excellent
102	14659	 farmer® with fibreglass post	90	Single		1.15		
102	14660	 farmer® with fibreglass post	90	Double		1.15		
102	14714	 farmer® with PVC post	90	Single		1.15		
102	14715	 farmer® with PVC post	90	Double		1.15		
104	14967	 horinetz super	145	Double		0.81		excellent
105	14992	 horinetz super plus	90 / 120	Single		1.15		excellent
105	14925	 horinetz super plus	90 / 120	Double		1.15		excellent
106	14503	 turbomax® high energy	90	Double		0.33		excellent
106	14533	 turbomax® high energy	105	Double		0.32		excellent
107	14534	 turbomax® high energy plus earth	105	Double		0.32	Yes	excellent
108	14652	 turbomax® high energy braided plus earth	105	Double		0.32	Yes	excellent









POULTRY NETTING

Page	Art.No.	Colour & Name	Netting length m	Netting height cm	Prong	Conductivity Ω / m	
110	15587	 ranger®	50	105	Single		0.74
110	15693	 ranger®	50	105	Double		0.74
109	14653	 farmer®	25	110	Double		1.15
109	14654	 farmer®	50	110	Double		1.15
109	14655	 farmer®	25	110	Double	not electrifiable	
109	14656	 farmer®	50	110	Double	not electrifiable	
109	14657	 farmer®	25	120	Double		1.15
109	14658	 farmer®	50	120	Double		1.15
110	34619	 ranger® security	25	105	Single	not electrifiable	
110	34621	 ranger® security	25	105	Double	not electrifiable	
110	34618	 ranger® security	50	105	Single	not electrifiable	
110	34620	 ranger® security	50	105	Double	not electrifiable	



SMALL ANIMAL NETTING

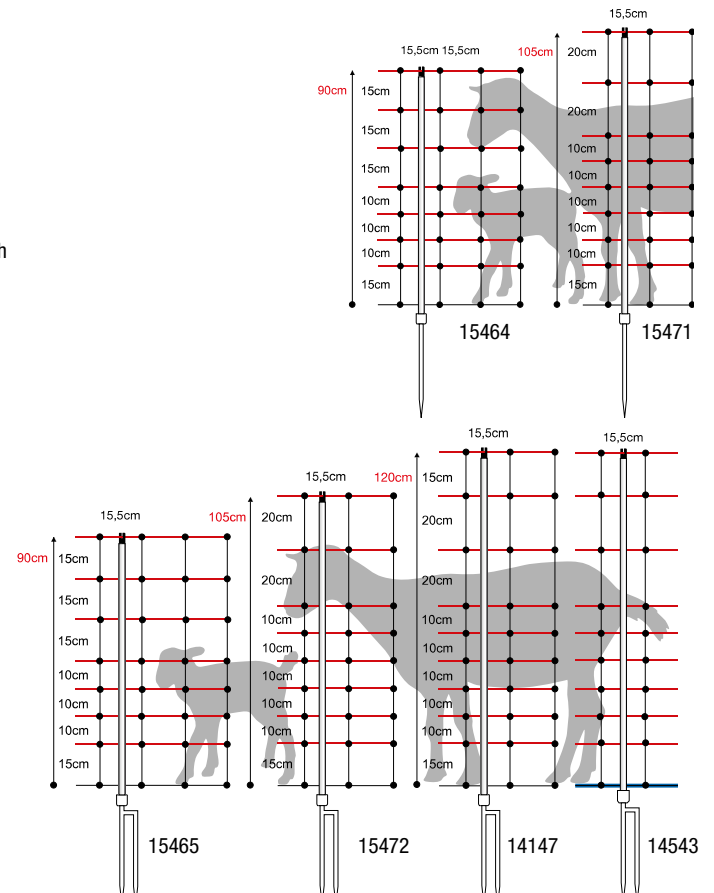
Page	Art.No.	Colour & Name	Netting length m	Netting height cm	Prong	Conductivity Ω / m	
112	15195	 farmer® super	25	50	Single		1.01
112	15576	 farmer® extra	50	50	Single		1.01
112	14895	 farmer® plus	50	65	Single		0.9

horinetz

Sheep and goat netting



- Suitable for:**
- Sheep and goats
 - Wolf deterrent and repelling of wild boars
- Bottom mesh size:**
- 15.0 cm high and 15.5 cm wide
- Advantages:**
- Good conductivity and extremely durable
 - High load rating possible
- Scope of delivery:**
- 1 x herding net horinetz complete
 - 14 plastic posts with single or double prong
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm high (15022-2), 105 cm high (15026-2) or 120 cm high (14384-2)



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
15464	90 cm	50 m	Single prong	14 / plastic	white	●●	8	7	1.15 Ω / m	1	4 014803 154644
15465	90 cm	50 m	Double prong	14 / plastic	white	●●	8	7	1.15 Ω / m	1	4 014803 154651
15471	105 cm	50 m	Single prong	14 / plastic	white	●●	9	8	1.01 Ω / m	1	4 014803 154712
15472	105 cm	50 m	Double prong	14 / plastic	white	●●	9	8	1.01 Ω / m	1	4 014803 154729
14147	120 cm	50 m	Double prong	14 / plastic	white	●●	10	9	0.84 Ω / m	1	4 014803 141477
14543	120 cm	50 m	Double prong	14 / plastic	white	●●	10	9 + 1 earth conductor	0.84 Ω / m	1	4 014803 476142

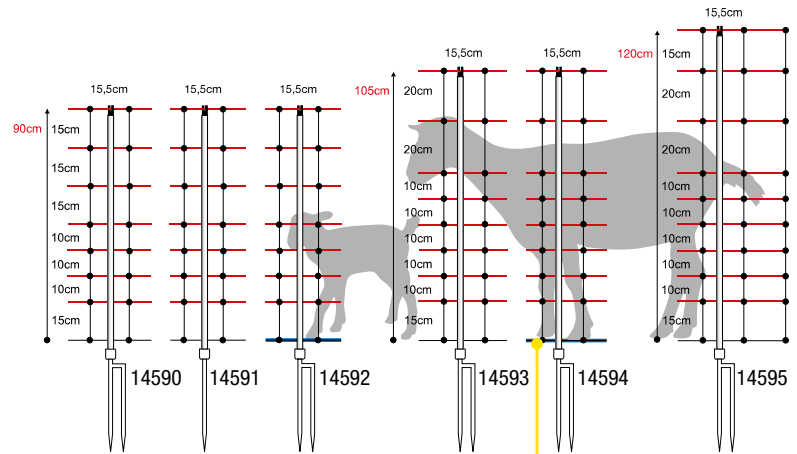


horinetz high energy Sheep and goat netting

- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 15 cm high and 15.5 cm wide
- Advantages:**
- Minimal leakage even with heavy vegetation due to non current-carrying bottom polywires
 - Good conductivity and extremely durable
 - High load rating possible
- Scope of delivery:**
- 1 x herding net horinetz high energy complete
 - 14 plastic posts with single or double prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm high (15022-2), 105 cm high (15026-2) or 120 cm high (14384-2)



ONE OF THE MOST CONDUCTIVE NETS IN THE MARKET!



additional earth conductor

- Provides good earthing even in dry conditions

Art. No.	Netting height	Netting length	Prong	Number of posts and material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14590	90 cm	50 m	Double prong	14 / plastic	white	●●	8	7	0.1 Ω / m	1	4 014803 476708
14591	90 cm	50 m	Single prong	14 / plastic	white	●●	8	7	0.1 Ω / m	1	4 014803 476715
14592	90 cm	50 m	Double prong	14 / plastic	white	●●	8	7 + 1 earth conductor	0.1 Ω / m	1	4 014803 476722
14593	105 cm	50 m	Double prong	14 / plastic	white	●●	9	8	0.1 Ω / m	1	4 014803 476739
14594	105 cm	50 m	Double prong	14 / plastic	white	●●	9	8 + 1 earth conductor	0.1 Ω / m	1	4 014803 476746
14595	120 cm	50 m	Double prong	14 / plastic	white	●●	10	9	0.1 Ω / m	1	4 014803 476753



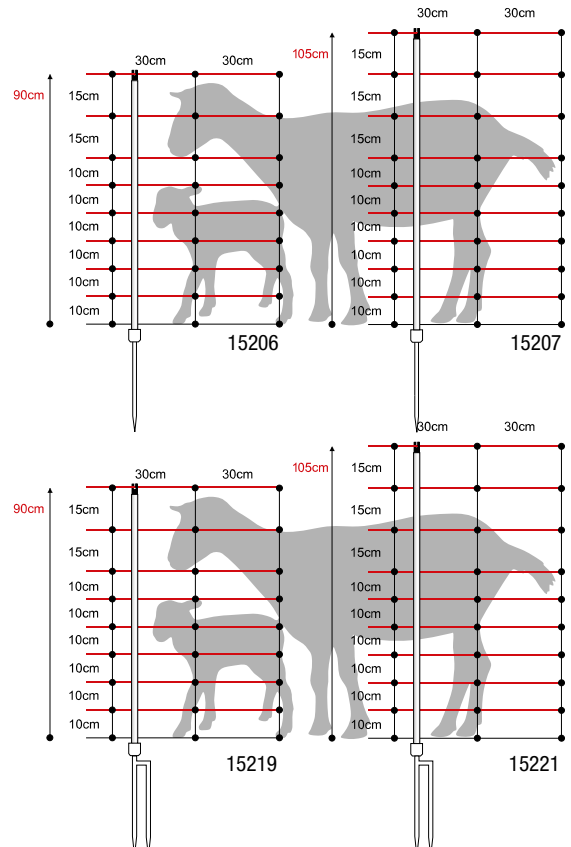
hotshock®

The hotshock® energisers are perfectly suited for use on herding nets!

turbomax[®] Extra Sheep and goat netting



- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 10 cm high and 30 cm wide
- Advantages:**
- High stability through special vertical connections
 - Tight mesh spacing prevents lambs from breaking out
 - Professional netting with high conductivity – for more safety
 - White with black outside edges for more contrast to the surroundings and for better visibility
 - horizontal quality with high-quality copper conductor
- Scope of delivery:**
- 1 x herding net complete, 50 m long
 - 14 x plastic posts with single or double prong
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm high (15022-2) or 105 cm high (15026-2)



Connecting clip



Head insulator



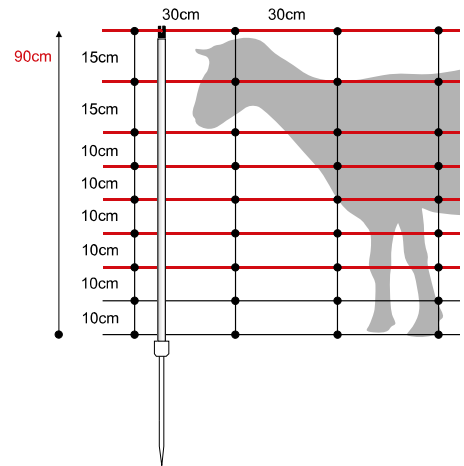
Foot tread with double prong

Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
15206	90 cm	50 m	Single prong	14 / plastic	white	○●	9	8	0.29 Ω / m	1	4 014803 152060
15219	90 cm	50 m	Double prong	14 / plastic	white	○●	9	8	0.29 Ω / m	1	4 014803 152190
15207	105 cm	50 m	Single prong	14 / plastic	white	○●	10	9	0.28 Ω / m	1	4 014803 152077
15221	105 cm	50 m	Double prong	14 / plastic	white	○●	10	9	0.28 Ω / m	1	4 014803 152213



turbomax® Plus Sheep and goat netting

- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 10 cm high and 30 cm wide
- Advantages:**
- Both bottom polywires are not current-carrying - no discharge and so cutting free is not necessary
 - High stability through rigid verticals
 - Long operating life due to robust conductor material
 - White polywire with black outside edges for more contrast to the surroundings and for better visibility
 - horizontal quality with high-quality copper conductor
- Scope of delivery:**
- 1 x herding net turbomax high energy complete, 90 cm high, 50 m long
 - 14 x plastic posts with single prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
 - Connecting accessories
- Accessories:**
- Replacement post with single prong Ø 13 mm, 90 cm high (14664)



Art. No.	Netting height	Netting length	Prong	Number of posts and material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14955	90 cm	50 m	Single prong	14 plastic posts	white		9	7	0.33 Ω / m	1	4 014803 149558

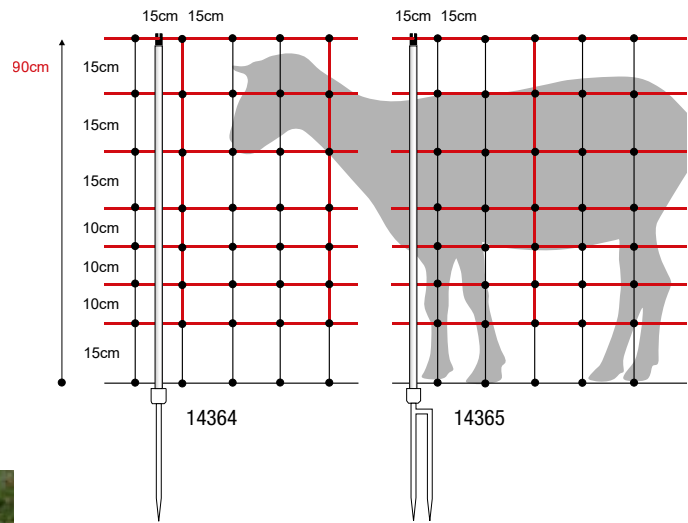


hotshock®
The hotshock® energisers are perfectly suited for use on herding nets!

Vertical Sheep and goat netting



- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 15 cm high and 15 cm wide
- Advantages:**
- Twice the safety due to vertical current conduction - if a polywire breaks, the power supply is ensured
 - High conductivity for optimal herding security
 - High quality posts for high stability
- Scope of delivery:**
- 1 x herding net complete, 90 cm high, 50 m long
 - 14 x posts with single prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm (15022-2)



Connecting clip



Head insulator



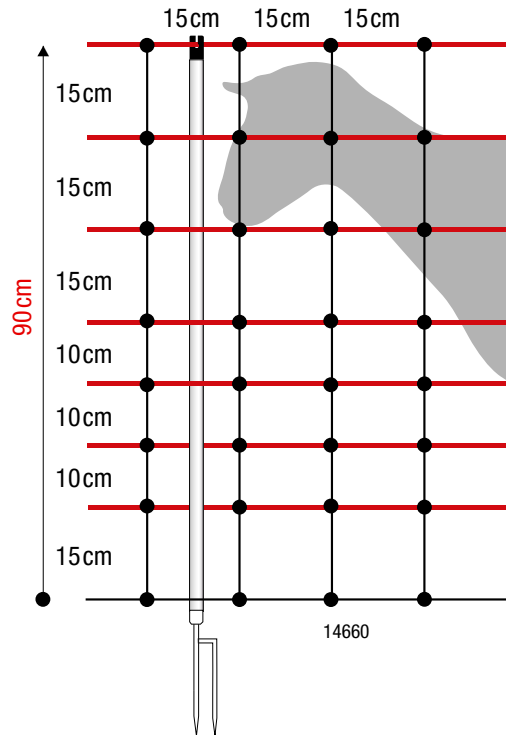
Ground stake

Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14364	90 cm	50 m	Single prong	14 / plastic	white	●●	8	7	0.17 Ω / m	1	4 014803 143648
14365	90 cm	50 m	Double prong	14 / plastic	white	●●	8	7	0.17 Ω / m	1	4 014803 143655



farmer®
Sheep net 90 cm

- Suitable for:** • Sheep and goats
- Bottom mesh size:** • 15 cm high and 15 cm wide
- Advantages:**
- Good conductivity and extremely durable
 - Available with stable fibreglass or classic PVC posts
 - Materials are rust-free and therefore extremely resistant
- Scope of delivery:**
- 1 x sheep net complete, 90 cm high, 50 m long
 - 14 x posts with single or double prong + 2 additional, non interwoven posts for individual use according to need
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm (14663)



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Conductivity Ω / m	Unit	EAN
14659	90 cm	50 m	Single prong	14 + 2 / fibreglass	black	●	8	7	1.15	1	4 014803 146595
14660	90 cm	50 m	Double prong	14 + 2 / fibreglass	black	●	8	7	1.15	1	4 014803 146601
14714	90 cm	50 m	Single prong	14 + 2 / PVC	white	●	8	7	1.15	1	4 014803 147141
14715	90 cm	50 m	Double prong	14 + 2 / PVC	white	●	8	7	1.15	1	4 014803 147158



RECOMMENDED BY SHEEP BREEDING ASSOCIATIONS

WOLF DETERRENT

FROM HORIZONT



THE CURRENT SITUATION AND OUR SOLUTIONS FOR YOU

Wolves have been detected in nearly all parts of Germany. The wolf has returned to wide parts of Germany. The delight over what we consider to be an extinct animal is clouded by the fact that it considers farm animals to be part of its diet. This is backed up by the sufferings endured by sheep and goat farmers across the country. This is where the electric fence comes into play, the development of which has been part of horizont's profession for decades. In several research projects in cooperation with the Saxon Sheep and Goat Breeding Association and the Baden-Württemberg State Sheep Breeding Association, horizont has developed reliable and particularly effective wolf deterrent systems to protect your farm animals. The netting has been extensively tested in practice and is recommended by the associations – for more safety on your pastures!

TURBOMAX HIGH ENERGY

The turbomax high energy netting is suitable for uneven terrain and mountains. Since the lower mesh spacings are particularly large, small wild animals can also slip through the netting and remain unharmed. Rigid verticals in the netting ensure solid stability. High energy in the netting is ensured due to a reduced number of horizontal polywires. The reduced number of horizontal polywires guarantees a particularly high conductivity with low energy consumption of the energiser.

HORINETZ SUPER PLUS

With the horinetz super with a height of 90 cm, a 20 mm wide tape can also be inserted at a height of 120 cm. The special construction can prevent the wolf from jumping over the net, as the movement of the tape in the wind irritates the wolf's field of vision and it cannot calculate its jump over the netting. UV-stable plastic posts in combination with double prongs ensure a secure stability, even in loose soil or in windy conditions.

HORINETZ SUPER

The horinetz super is an extra high special net as wolf deterrent with 145 cm height. In combination with further wolf deterrent measures, this high netting offers very good protection against the wolf and prevents attacks on your animals. The stable posts with a 19 mm post diameter ensure the secure stability of the netting. This ensures that your animals are safely and reliably fenced in.

P. 102



Art. No. 14503/ 14533
with additional earth conductor: Art. No. 14534/ 14652

P. 104



Art. No. 14992/ 14925

P. 103

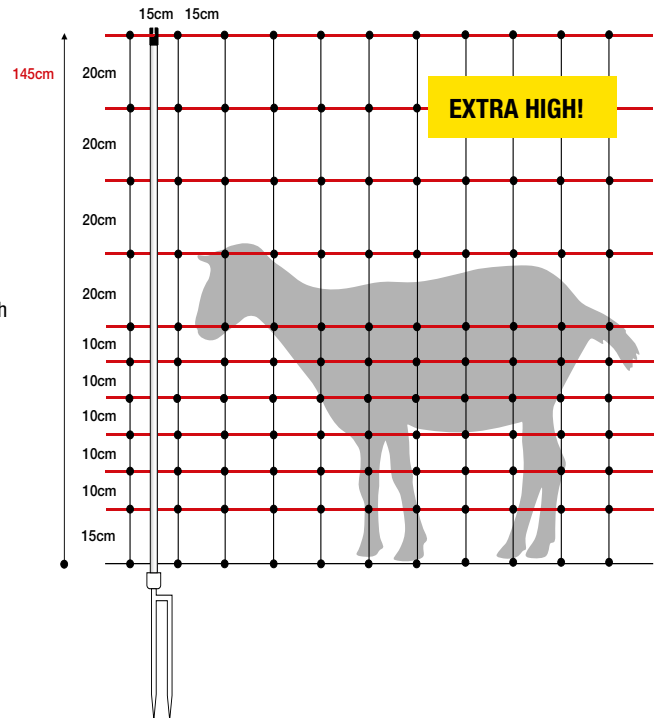


Art. No. 14967

horinetz super Wolf deterrent netting



- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 15 cm high and 15 cm wide
- Advantages:**
- Extra high special net for wolf defence with 145 cm height
 - High stability due to reinforced top and bottom polywires
- Scope of delivery:**
- 1 x herding net wolf deterrent netting horinetz super complete, 145 cm high, 50 m long
 - 15 x plastic posts with double prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 19 mm, 145 cm high (14993)



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14967	145 cm	50 m	Double prong	15 / plastic	black		11	10	0.81 Ω / m	1	4 014803 149671

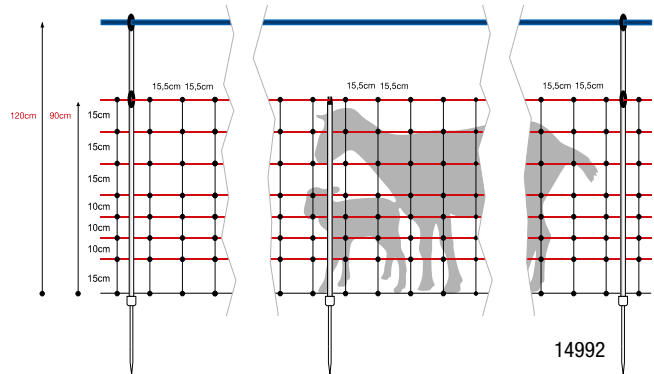


horinetz super plus Wolf deterrent netting

- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 15 cm high and 15.5 cm wide
- Advantages:**
- Recommended by the Saxon Sheep and Goat Breeding Association
 - Increased jump height through additional 20 mm tape at 120 cm height
 - Quick and easy assembly
 - High energy due to accompanying earth conductor
- Scope of delivery:**
- 1 x herding net wolf deterrent netting horinetz super plus complete, 50 m long
 - 15 x plastic posts with single or double prong
 - 1 x additional post 1.20 m for adaptation to ground contour
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 90 cm high (15022-2, 15)
 - 20 mm tape (17111)
 - Earth stake for guying and earthing (15017-1)
 - Tape connecting cable (10447C)



A wolf deterrent system was developed together with the Saxon Sheep and Goat Breeding Association which is unique to date and has proven to prevent wolves from attacking farm animals.



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14992	90 / 120 cm	50 m	Single prong	15 / plastic	white	●●	8	7	1.15 Ω / m	1	4 014803 149923
14925	90 / 120 cm	50 m	Double prong	15 / plastic	white	●●	8	7	1.15 Ω / m	1	4 014803 149251

Anti-jump protection through additional tape

- Netting increased to 120 cm through 20 mm tape
- The movement of the tape irritates the wolf; it cannot calculate the jump

Posts with double prongs

- Posts are made of UV-resistant plastic
- Double prongs ensure secure stability even in loose soil or in windy conditions

High stability

- Top and ground polywires reinforced by more than 60 %

High energy due to accompanying earth conductor

Good visibility

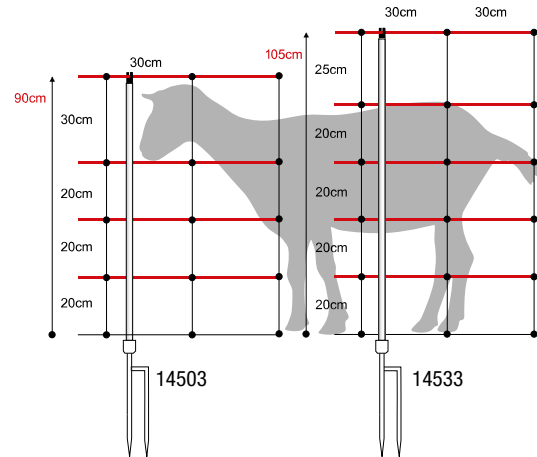
- Yellow polywires are easier to see in twilight or darkness

turbomax® high energy Wolf deterrent netting

- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 20 cm high and 30 cm wide
- Advantages:**
- Due to large mesh spacing at the bottom, small wild animals can slip through and are thus protected
 - Rigid verticals ensure solid stability
 - Low weight – 10% lighter than conventional netting
 - Reduced number of horizontal polywires provides high energy due to less contact with vegetation
 - White with black outside edges for more contrast to the surroundings and for better visibility
- Scope of delivery:**
- 1 x herding net turbomax high energy complete, 50 m long
 - 14 x plastic posts with double prongs
 - 14 x plastic posts with double prongs
- Accessories:**
- 1 x repair kit, 1 x warning sign and 2 x ground stakes
 - Replacement post with double prong Ø 13 mm, 90 cm high (15022-2) or 105 cm high (15026-2)



The particularly high herding security is recommended by the Baden-Württemberg State Sheep Breeding Association. This sheep and goat netting was developed together with horizon.



Connecting clip



Head insulator



Ground stake

Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14503	90 cm	50 m	Double prong	14 / plastic	white	☐●	5	4	0.33 Ω / m	1	4 014803 145031
14533	105 cm	50 m	Double prong	14 / plastic	white	○●	6	5	0.32 Ω / m	1	4 014803 145338

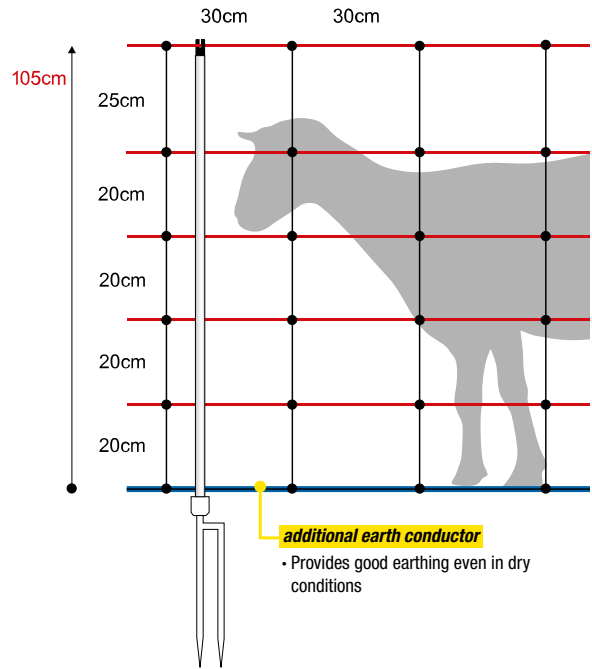


turbomax® high energy plus earth Wolf deterrent netting

- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 20 cm high and 30 cm wide
- Advantages:**
- Due to large mesh spacing at the bottom, small wild animals can slip through and are thus protected
 - Rigid verticals ensure solid stability
 - Low weight- 10% lighter than conventional netting
 - Reduced number of horizontal polywires ensure high energy
 - Additional earth conductor ensures good earthing even in dry conditions
 - White polywire with black outside edges for more contrast to the surroundings and for better visibility
 - horizontal quality with high-quality copper conductor
- Scope of delivery:**
- 1 x herding net turbomax high energy plus earth complete, 105 cm high, 50 m long
 - 14 x plastic posts with double prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 105 cm high (15026-2)



The particularly high herding security is recommended by the Baden-Württemberg State Sheep Breeding Association. This sheep and goat netting was developed together with horizon.



Connecting clip



Head insulator



Double step with polywire holder

Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14534	105 cm	50 m	Double prong	14 / plastic	white	○●	6	5	0.32 Ω / m	1	4 014803 463111

TIP

A herd protection tape is the perfect supplement to a safe wild animal deterrent net.



Signal tape

- Features:**
- 80 mm wide
 - 100 m on a roll
 - blue / white
- Advantage:**
- Effective wild animal deterrent
 - In a practical dispenser roll-off box

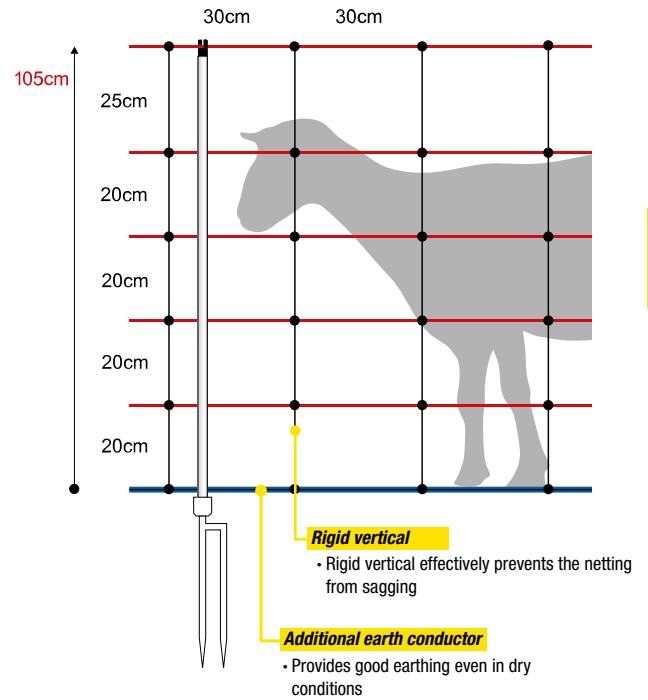
Art. No.	Unit	EAN
14622	1	4 014803 155672



NEW turbomax®
high energy braided
Wolf deterrent netting



- Suitable for:**
- Sheep and goats
 - Wolf deterrent and wild boar repellent
- Bottom mesh size:**
- 20 cm high and 30 cm wide
- Advantages:**
- Braided polywire: Conductor braided into the PE monofilaments and thus very well protected and very high-tensile
 - The braided strand will result in less tangles when pulling or while carrying (reduces wear and tear of the net)
 - Earth conductors, which are a great advantage especially in dry conditions
 - Braided polywire: and the rigid verticals ensure solid stability and a constant height
 - Netting is easy to assemble as re-tensioning is not necessary
 - Due to large mesh spacing at the bottom, small game can slip through and are thus protected
 - Suitable for mobile and also semi-permanent netting (dismantled at irregular intervals, stands for several months)
- Scope of delivery:**
- 1 x herding net turbomax high energy plus earth complete, 105 cm high, 50 m long
 - 14 x plastic posts with double prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 105 cm high (15026-2)



Connecting clip



braided polywire



Rigid vertical



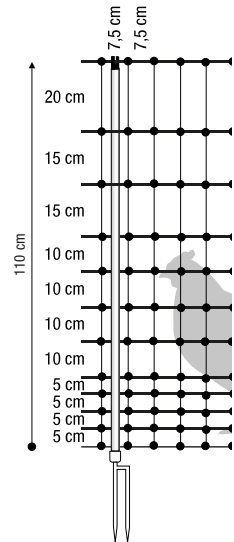
Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14652	105 cm	50 m	Double prong	14 / plastic	white	○●	6	5	0.32 Ω / m	1	4 014803 541321



farmer® poultry netting with fibreglass posts 110 cm



- In many variants:**
- Electrifiable and non electrifiable!
 - 25 m or 50 m lengths
- Suitable for:**
- For poultry and other small animals
- Advantages:**
- Very good stability due to robust double prongs
 - Fast assembly of netting
 - Ideal for gardens or pastures – effective security netting
- Scope of delivery:**
- 1 x poultry netting, posts with double prongs, comprehensive repair kit
 - Including 2 additional non interwoven posts for individual use according to need
- Accessories:**
- Replacement post with double prong Ø 13 mm, 110 cm high (14662)

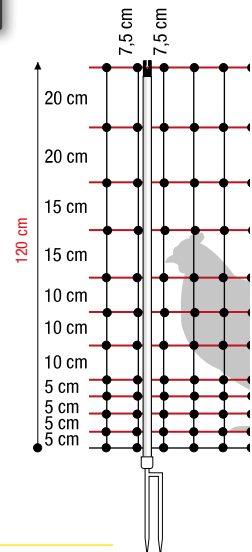


Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Conductivity Ω / m	Unit	EAN
14653	110 cm	25 m	Double prong	9 + 2 / fibreglass	black	●	12	11	1.15	1	4 014803 146533
14654	110 cm	50 m	Double prong	15 + 2 / fibreglass	black	●	12	11	1.15	1	4 014803 146540
14655	110 cm	25 m	Double prong	9 + 2 / fibreglass	black	●	12		not electrifiable	1	4 014803 146557
14656	110 cm	50 m	Double prong	15 + 2 / fibreglass	black	●	12		not electrifiable	1	4 014803 146564

farmer® poultry netting with fibreglass posts 120 cm



- Suitable for:**
- For poultry and other small animals
- Advantages:**
- Enormous security due to electrifiable netting
 - Very good stability due to robust double prongs
 - Fast assembly of netting
 - Ideal for gardens or pastures – effective security netting
- Scope of delivery:**
- 1 x poultry netting, posts with double prongs, comprehensive repair kit
 - Including 2 additional non interwoven posts for individual use according to need
- Accessories:**
- Replacement post with double prongs Ø 13 mm, 120 cm high (14661)



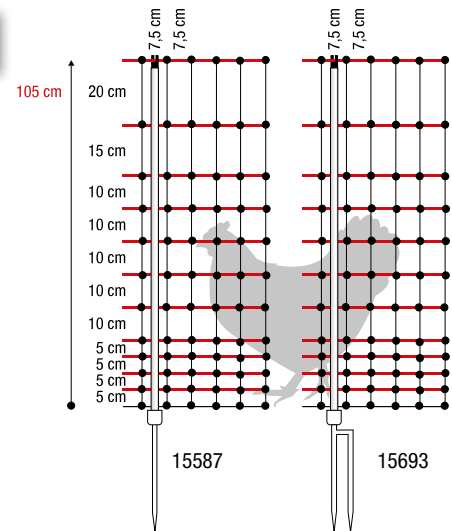
Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Conductivity Ω / m	Unit	EAN
14657	120 cm	25 m	Double prong	9 + 2 / fibreglass	black	●	12	11	1.15	1	4 014803 146571
14658	120 cm	50 m	Double prong	15 + 2 / fibreglass	black	●	12	11	1.15	1	4 014803 146588



ranger® Poultry netting 105 cm



- Suitable for:** • Chickens, turkeys, geese and ducks
- Bottom mesh size:** • 5 cm high and 7.5 cm wide
- Advantages:**
- High conductivity for optimal herding security
 - High quality posts for high stability
 - Materials are rust-free and therefore extremely resistant
- Scope of delivery:**
- 1 x poultry netting complete, 105 cm high, 50 m long
 - 15 x posts with single or double prongs
 - 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 105 cm high (15026-2)

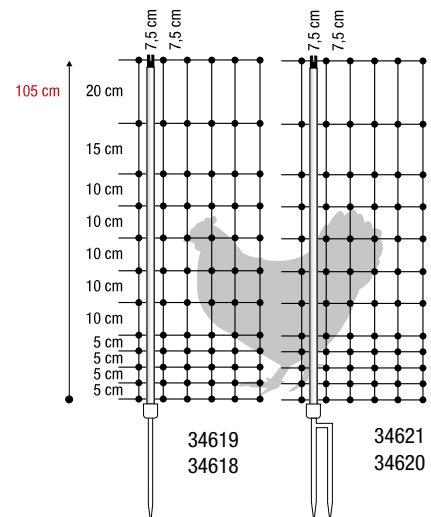


Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
15587	105 cm	50 m	Single prong	15 / plastic	white	●	12	11	0.74 Ω / m	1	4 014803 145031
15693	105 cm	50 m	Double prong	15 / plastic	white	●	12	11	0.74 Ω / m	1	4 014803 145338

ranger® security Poultry netting (not electrifiable)



- Suitable for:** • Chickens, turkeys, geese and ducks
- Bottom mesh size:** • 5 cm high and 7.5 cm wide
- Advantages:**
- Tool-free connection of several nets
 - High quality posts for high stability
 - Without current-carrying conductors, no electrification possible
- Scope of delivery:**
- 1 x poultry netting complete, 105 cm high, 50 m long
 - Posts with single or double prongs
 - Repair kit, 2 x ground stakes
- Accessories:**
- Replacement post with double prong Ø 13 mm, 110 cm high (14662)



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
34619	105 cm	25 m	Single prong	9 / plastic	green	●	12	not electrifiable		1	4 014803 346193
34621	105 cm	25 m	Double prong	9 / plastic	green	●	12	not electrifiable		1	4 014803 346216
34618	105 cm	50 m	Single prong	15 / plastic	green	●	12	not electrifiable		1	4 014803 346186
34620	105 cm	50 m	Double prong	15 / plastic	green	●	12	not electrifiable		1	4 014803 346209



EVEN MORE FOR FEATHERED FRIENDS

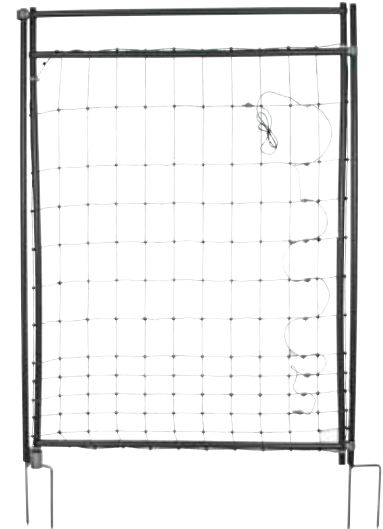


Our animal husbandry catalogue offers the right range of products for poultry farming. Let our service team assist you.

Hotgate Gate for electric fence netting

Ideally suited for keeping your animals such as geese, chickens, turkeys, sheep and dogs

- Advantages:**
- Electrifiable
 - For electric fence netting up to 120 cm or 105 cm height (except item no 14697)
 - Quick and safer passage to your pasture area
 - Escape-proof protection thanks to smaller mesh size in the lower net area
 - Firmly welded junctions & reinforced upper polywire
 - Flexible use: Gate can be installed at any point of a net
- Material:**
- PVC posts with double prong
- Colour:**
- Black
- Scope of delivery:**
- Connection accessories

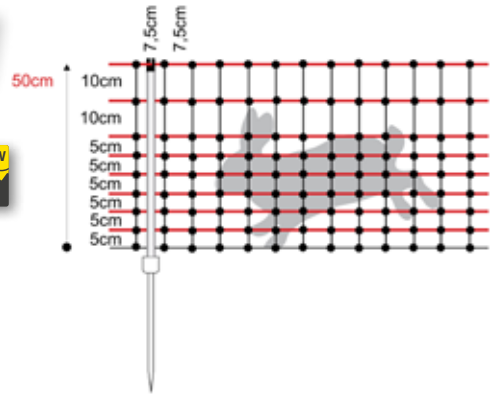


Art. No.	Height	Width	Prong	Material	Colour	Compatible with	Unit	EAN
14665	120 cm	81 cm	Double prong	PVC	●	105 cm to 120 cm high nets (e.g. 14657, 14658)	1	4 014803 146656
14666	110 cm	81 cm	Double prong	PVC	●	90 cm to 105 cm high nets (e.g. 15693, 14654, 34620)	1	4 014803 146663
14697	90 cm	81 cm	Double prong	PVC	●	90 cm boundary nets (e.g. 14691, 14694) not electrifiable	1	4 014803 147639



farmer® super | small animal netting

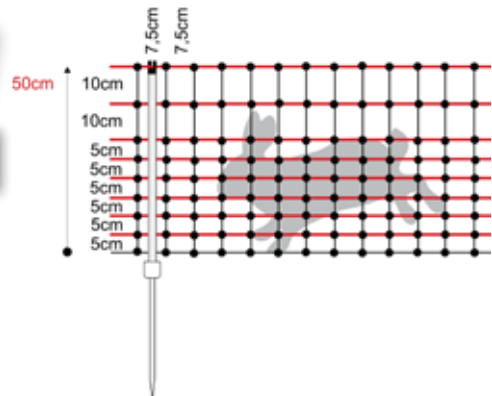
- Suitable for:** • Hares and rabbits
- Bottom mesh size:** • 5 cm high and 7.5 cm wide
- Advantages:** • High quality posts for high stability
• horizont quality with high-quality stainless steel conductors
- Scope of delivery:** • 1 x herding net complete, 50 cm high, 25 m long
• 9 x posts with single prongs
• 1 x repair kit, 1 x warning sign and 2 x ground stakes
- Accessories:** • Replacement post with single prong with Ø 13 mm, 50 cm high (15223)



Art. No.	Netting height	Netting length	Prong	Number of posts/material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
15195	50 cm	25 m	Single prong	9 / plastic	green	●	9	8	1.01 Ω / m	1	4 014803 151957

farmer® extra | small animal netting

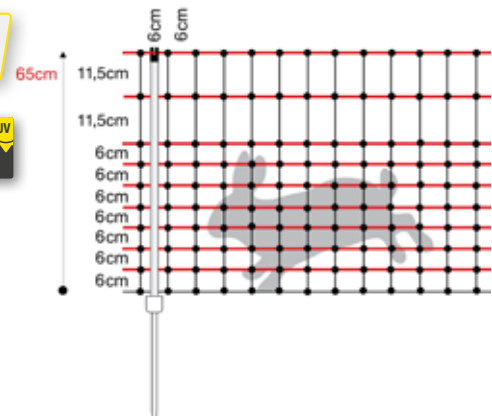
- Suitable for:** • Chicks, small hares and rabbits
- Bottom mesh size:** • 5 cm high and 7.5 cm wide
- Advantages:** • High quality posts for high stability
• horizont quality with high-quality stainless steel conductors
- Scope of delivery:** • 1 x herding net complete, 50 cm high, 50 m long
• 15 x posts with single prongs
• Connecting accessories
- Accessories:** • Replacement post with single prong with Ø 13 mm, 50 cm high (15028)



Art. No.	Netting height	Netting length	Prong	Number of posts/material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
15576	50 cm	50 m	Single prong	15 / plastic	white	●●	9	8	1.01 Ω / m	1	4 014803 155764

farmer® plus | small animal netting

- Suitable for:** • Chicks, small hares and rabbits
- Bottom mesh size:** • 6 cm high and 6 cm wide
- Advantages:** • High quality posts for high stability
• horizont quality with high-quality stainless steel conductors
- Scope of delivery:** • 1 x herding net complete, 65 cm high, 50 m long
• 15 x posts with single prongs
• Connecting accessories
- Accessories:** • Replacement post with single prong with Ø 13 mm, 50 cm high (15223)



Art. No.	Netting height	Netting length	Prong	Number of posts/material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14895	65 cm	50 m	Single prong	15 / plastic	green	●	10	9	0.90 Ω / m	1	4 014803 148957



NEW Boundary net

Versatile for use in the garden, home, yard, camping or to protect your flower beds. Ideally suited for fencing in small areas or demarcating individual property areas!

- Small mesh spacing, continuous 17 x 17 mm
- Fibreglass posts ensure stability
- uncomplicated assembly and dismantling
- integrated tread: Posts are easy to push into the ground
- 90 cm high
- including comprehensive range of accessories: Stakes, guy ropes and clips
- Note: Not electrifiable

Boundary net Fix:

integrated fibreglass posts, extremely close post spacing approx. 1.8 m

Boundary net Flex:

Insert the posts exactly where you need them - a real advantage especially on uneven and in angled areas

Additional clip insulators for even more flexibility when assembling

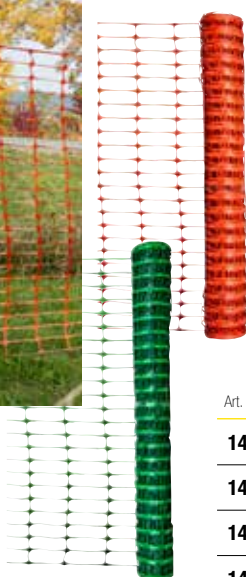
Boundary net Fix:



Boundary net Flex:



Art. No.	Designation	Netting height	Netting length	Number of posts	Colour of netting	Unit	EAN
14691	Boundary net Fix	90 cm	15 m	9 +2	●	1	4 014803 147646
14692	Boundary net Fix	90 cm	20 m	12 +2	●	1	4 014803 147653
14693	Boundary net Fix	90 cm	25 m	15+2	●	1	4 014803 147660
14694	Boundary net Flex	90 cm	15 m	9+2	●	1	4 014803 147677
14695	Boundary net Flex	90 cm	25 m	15+2	●	1	4 014803 147684
14697	Boundary net gate	90 cm			●	1	4 014803 147639



NEW Barrier fence

Economical and effective fence suitable for

- Garden areas or camping sites
- To protect trees from animals
- Closing off streets or paths
- Separate smaller pets in the garden

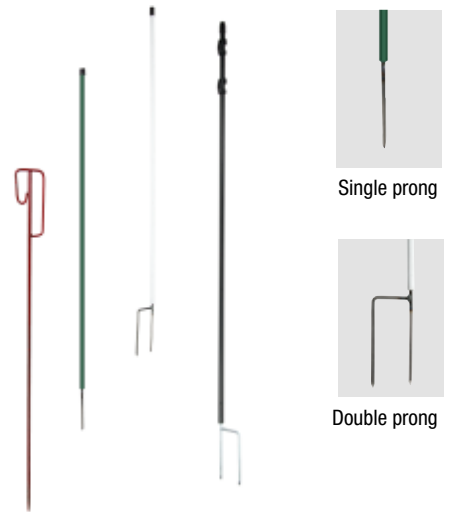
Advantages:

- 1 m high, 50 m long
- Uncomplicated assembly and dismantling
- Light quality, 80 g / m²
- Also available as complete fence solution as a set with ten matching UVV metal posts in red
- Posts also available separately: 14706

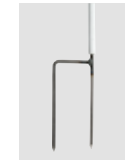
Art. No.	Designation	Colour	Length	Height	Unit	EAN
14686	Barrier fence green	●	50 m	1 m	1	4 014803 146892
14707	Barrier fence green, incl. posts	●	50 m	1 m	1	4 014803 147073
14867	Barrier fence orange	●	50 m	1 m	1	4 014803 148674
146340R-SET	Barrier fence orange, incl. posts	●	50 m	1 m	1	4 014803 147035

Replacement posts

Art. No.	Material	Prong	Post height above ground	Colour	Diameter	Unit	EAN
15223	PVC	Single prong	50 cm	green	13 mm	5	4 014803 152237
15224	PVC	Single prong	75 cm	green	13 mm	1	4 014803 152244
15022-2	PVC	Double prong	90 cm	white	13 mm	1	4 014803 403278
15026-2	PVC	Double prong	105 cm	white	13 mm	1	4 014803 403285
14384-2	PVC	Double prong	120 cm	white	15 mm	1	4 014803 143846
14993	PVC	Double prong	145 cm	black	19 mm	1	4 014803 149930
14661	Fibreglass	Double prong	120 cm	black	13 mm	5	4 014803 146618
14662	Fibreglass	Double prong	110 cm	black	13 mm	5	4 014803 146625
14663	Fibreglass	Double prong	90 cm	black	13 mm	5	4 014803 146632
14664	Fibreglass	Single prong	90 cm	black	13 mm	5	4 014803 146649
14696	Fibreglass	Single prong	90 cm	black	10 x 8 mm	5	4 014803 147691
14706	Metal	Single prong	100 cm	red	12 mm	10	4 014803 147066



Single prong



Double prong

Repair kit for turbomax® sheep netting

- Scope of delivery:**
- 1 x black replacement polywire
 - 2 x green/white replacement polywire
 - 2 x black plastic cap for post
 - 2 x black plastic eye
 - 6 x brass metal clip

Art. No.	Unit	EAN
15029-6	1	4 014803 420688



Repair kit for poultry netting

- Scope of delivery:**
- 2 x green replacement polywire
 - 1 x black plastic cap for post
 - 2 x black plastic eye
 - 6 x brass metal clip

Art. No.	Unit	EAN
15029-5	1	4 014803 008749



Spare parts for electric nets

Art. No.	Designation	Unit	EAN
15030-1	black plastic cap for post	1	4 014803 150301
15030-5	Stake	1	4 014803 425102
15030-2	black plastic eye	1	4 014803 002235
15030-23	Brass metal clip	1	4 014803 428271



15030-1

15030-2

15030-23

15030-5



06

Conductor material & Accessories

An optimal pasture situation consists of a well built electric fence. Tautly stretched and clearly visible conductor material is particularly important. The visibility of the conductor material for animals and humans is decisive for the herding security of the fence system. Attention should also be paid to a high conductivity to ensure a correspondingly high herding security.

116 | Guide

118 | Product guide

122 | Electric fence tape

124 | Electric fence rope

126 | Electric fence polywire

130 | Electric fence wire

132 | Electric fence connectors and tensioners

136 | Reels

THINGS TO KNOW ABOUT

CONDUCTOR MATERIAL & ACCESSORIES

Conductor materials must be highly conductive, tear-resistant and weatherproof. Good visibility can increase the effect and is essential for fleeing animals like horses. Due to the risk of injury, barbed wire should not be used as a fence conductor. Apart from the energiser, conductor material is one of the most important components of the fence system for mobile or permanent fencing. By choosing the right conductor, you can significantly influence herding security.

1. THE RIGHT CHOICE OF CONDUCTOR MATERIAL

Conductor materials can be plastic-metal mixtures or pure metallic materials - e.g. various electrifiable wires, these have the highest conductivity. Particular attention should be paid to the following values when selecting the conductor material:



The **RESISTANCE** is given in ohms / m. The lower this value, the higher the quality of the conductor material. High resistance values cannot be compensated even with powerful energisers!



The **BREAKING LOAD** is given in kilograms and indicates the maximum load (in kg) or tensile force the conductor material can withstand.



The **NUMBER AND THICKNESS** of the current-carrying conductors provides information about its conductivity. The more conductors and the thicker the conductors are in the conductor material, the more current is carried.

IN GENERAL: The better the electricity is transported in the fence, the longer fences can be built or the higher the herding voltage in the fence.

SEVERAL LEVELS IN THE FENCE:

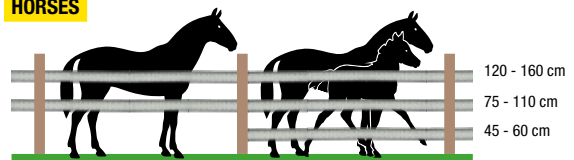
When using several levels in the fence, the following should be noted:

- The total resistance of the fence system decreases with each additional level (conductor material) – but it is always smaller than the lowest resistance value of a level
- With fencing, the same conductor material should always be used on the different levels, as this guarantees optimum herding security – different conductor materials can also be mixed in the fence system under special conditions (e.g. in cattle farming)
- If the lowest level of the conductor material is covered with vegetation, the energy loss from the fence increases due to current leakage
- Ideally, the levels in the fence are free of vegetation, which has a positive effect on the maximum fence length
- For outdoor fencing, the use of conductor material with low resistance values is recommended – however, subdivisions in the fence or strip grazing can also be equipped with conductor material with higher Ω/m values due to their small size

RECOMMENDATIONS FOR DIFFERENT TYPES OF ANIMALS:

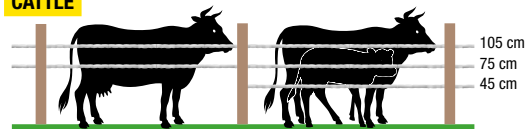
For different types of animals, horizon recommends different conductor materials and a certain number of levels* when building fences:

HORSES



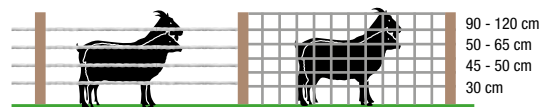
horizon recommends fencing horses with 40 mm wide electric fence tape; horses are fleeing animals, and the wider the electric fence tape, the better it is perceived by the animals. This considerably reduces the risk of injury and escape of your animals!

CATTLE



horizon recommends fencing cattle with electric fence rope or polywire.

SHEEP AND GOATS



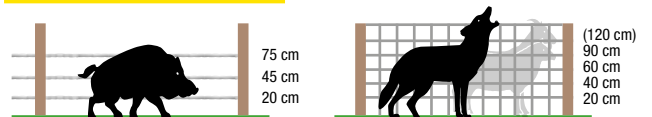
Sheep and goats can be fenced in locally with electric fence polywire. Alternatively, electric nets are also ideal for herding such animals.

POULTRY

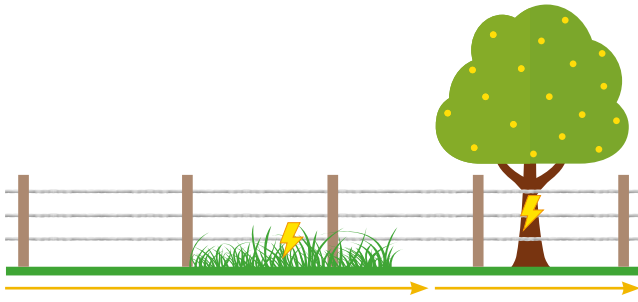


horizon recommends fencing in poultry with electric nets.

WILDLIFE OR WOLF DETERRENT

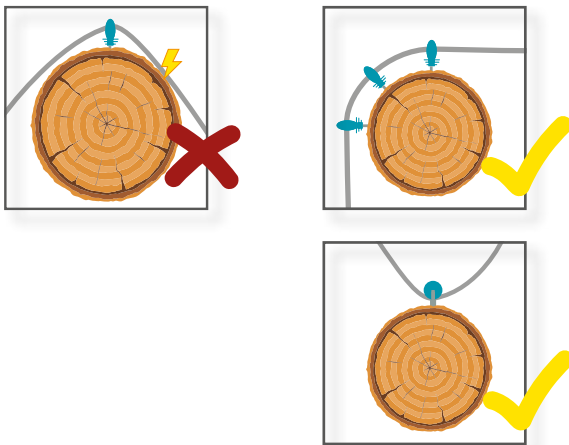


horizon recommends securing corn fields or forest areas against wild boars with electric fence tape or rope. For wolf deterrent and for the protection of sheep or goats, horizon recommends the use of special wolf deterrent netting.



2. MALFUNCTIONS AT THE FENCE

The above diagram illustrates the malfunctions that can be caused by vegetation at the fence, for example. Consequently, the fence should always be kept in proper condition, the fence voltage should be checked regularly, the fence should be kept free of vegetation and connectors should be used if a conductor breaks. This will increase the durability of your fence and the safety of your animals will not be reduced by avoidable defects in the fence. The fence gains stability.

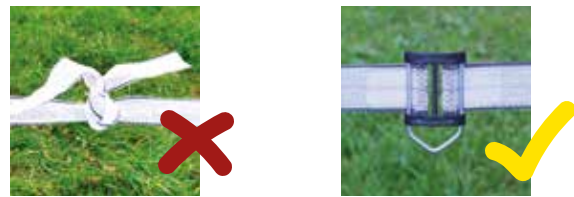


Conductor material attached to wood posts, often resulting from incorrectly attached insulators, can also influence the current flow. The conductor material should always be run in appropriate insulators.

3. TIPS FOR HANDLING CONDUCTOR MATERIAL

If the conductor material is torn, use suitable accessories such as connectors to restore the herding security. If the conductor material is sagging and needs to be re-tensioned, use the appropriate tensioners to keep it properly at height again. Do not wrap the conductor material in the dry room of the insulators; this can cause spark-overs on the support of the insulator. In winter, water accumulation can cause the conductor material to be significantly heavier and sag. If you do not use your pasture in winter, dismantle your fence. A recommended method for easy and practical storage of the conductor material is to wind it onto reels. This allows for direct storage and the use of reels also makes it easier to reassemble the fence in the spring.




Do not knot the conductor material, as a constant current flow in the fence is no longer guaranteed in this case. Instead, use suitable connectors from horizon.



In areas particularly exposed to the wind, electric fence tapes should be twisted when tensioned, as this reduces the surface area exposed to gusts of wind and increases the stability of your fence.

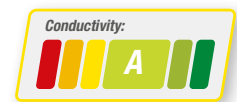
4. DIFFERENT LEVELS OF QUALITY

Various technologies were developed for the horizon conductor material to make it even more conductive. The different resistance values are decisive here:

	<i>turbomax®</i>	0.08 - 0.17 Ω / m
	<i>ranger®</i>	0.20 - 0.53 Ω / m
	<i>hotshock®</i>	0.24 - 0.53 Ω / m

THE CONDUCTIVITY:

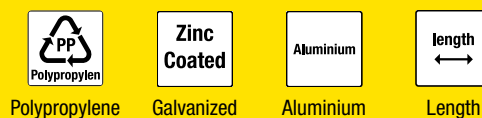
The required herding pulse energy can be achieved through high electrical conductivity. Each horizon conductor material type contains information on conductivity, e.g. the symbol A++, which stands for the highest conductivity.



Important icons for this chapter:

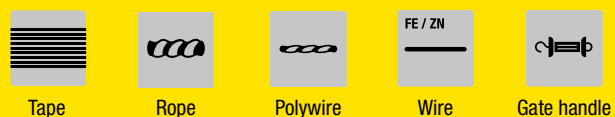
Product describing icons:

These icons describe insulator features.



Cross selling icons:

These icons refer to products that are additionally required and are compatible with the selected product.











PRODUCT GUIDE

CONDUCTOR MATERIAL

ELECTRIC FENCE TAPES

- excellently suited for
- conditionally suited for

Type of animal								Fence length*	Width	Breaking load	Colour	Product		
								m	mm	~ kg		Designation	Art. No.	Page
	•	•						210	10	20	white	trapper® T10 - W	17280	123
	•	•	•	•	•		•	210	10	40	white	farmer® T10 - W	17451	123
	•	•	•	•	•		•	210	10	40	yellow/orange	farmer® T10 - O	17287	123
	•	•	•	•	•		•	280	20	90	white	farmer® T20 - W	17475	123
	•	•	•	•	•		•	280	20	90	white	farmer® T20 - W	17272	123
	•	•	•	•	•		•	280	20	90	yellow/orange	farmer® T20 - O	17528	123
•	•	•	•	•	•		•	560	40	120	white	farmer® T40 - W	17458	123
	•		•	•			•	5,600	12	100	white/blue	hotshock® T12 - W	17211	124
	•	•	•	•			•	9,100	12	60	yellow/blue/green	ranger® FLUO T12	17116	124
	•	•	•	•			•	9,100	12	60	white/yellow	ranger® T12 - W	17113	124
	•	•	•	•			•	11,100	20	120	white/yellow	ranger® T20 - W	17114	124
•	•	•	•	•			•	15,000	40	180	white/yellow	ranger® T40 - W	17115	124
	•	•	•	•			•	9,100	20	150	white	ranger® T20 - W-E	17121	124
	•	•	•	•			•	9,100	20	150	brown	ranger® T20 - B-E	17122	124
•	•	•	•	•			•	15,000	40	260	brown	ranger® T40 - B-E	17125	124
	•	•	•	•			•	21,400	12	60	white/black	turbomax® T12	17110	123
	•	•	•	•			•	20,000	20	140	white/black	turbomax® T20	17111	123
•	•	•	•	•			•	33,300	40	240	white/black	turbomax® T40	17112	123



ELECTRIC FENCE ROPES

Fence length*	Type of animal								Ø	Breaking load	Colour	Product		
												mm	~ kg	Designation
740		•	•	•	•	•			6	250	white	farmer® R6	153372	125
740		•	•	•	•	•			6	250	white	farmer® R6	153372-400	125
370		•	•	•	•	•			8	100	white/black	farmer® stretch W3	462560	125
13,700		•	•	•	•	•			6	250	white/yellow	ranger® R6	17182	126
13,700		•	•	•	•	•			6	250	white/yellow	ranger® R6	17182-400	126
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180	126
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180-400	126
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180-800	126
33,300		•	•	•	•	•		•	5.5	600	white/black	turbomax® braided rope D5.5	145131-400	126

ELECTRIC FENCE WIRES









Fence length*	Type of animal								Ø	Breaking load	Material	Product		
												mm	~ kg	Designation
8,300		•	•	•	•				1.5	30	Iron	Dederon polywire	15833S	132
60,000		•	•		•	•	•		1.8	500	galvanized	Steel wire	15036	132
25,000		•	•	•	•	•	•		1.5	200	galvanized	Stranded wire	15009	132
25,000		•	•	•					1.5	200	galvanized	Stranded wire	14134	132
25,000		•	•	•					1.5	200	galvanized	Stranded wire	14134-400	132
50,000		•	•	•	•		•	•	1.6	200	galvanized	GALVADUR	15904	132
75,000		•	•	•	•		•	•	2.5	500	galvanized	GALVADUR	15945	132

PRODUCT GUIDE FOR ELECTRIC FENCE POLYWIRES



- excellently suited for
- conditionally suited for

ELECTRIC FENCE POLYWIRE

Fence length*	Type of animal								Breaking load ~ kg	Colour	Product		
											Designation	Art. No.	Page
210		•					•	•	30	yellow/orange	trapper® W3	15567	128
900		•	•			◦	◦	◦	70	white	farmer® W9 - W	15277	128
600		•	•			◦	◦	◦	60	white	farmer® W6 - W	15282	128
600		•	•			◦	◦	◦	60	white	farmer® W6 - W	15283	128
300		•	•			◦	◦	◦	50	yellow/orange	farmer® W3 - 0	15345	128
12,700		•	•	•	•			•	120	white/blue	hotshock® W9 - B	17149	128
12,700		•	•	•	•			•	120	white/blue	hotshock® W9 - B	17149-400	128
8,600		•	•	•	◦			•	160	orange/grey	ranger® W3 - 0	17143	129
8,600		•	•	•	◦			•	160	orange/grey	ranger® W3 - 0	17143-400	129
8,600		•	•	•	◦			•	160	orange/grey	ranger® W3 - 0	17143-1000	129
8,600		•	•	•	◦			•	160	white/yellow	ranger® W3 - W	17144	129
8,600		•	•	•	◦			•	160	white/yellow	ranger® W3 - W	17144-400	129
8,600		•	•	•	◦			•	160	white/yellow	ranger® W3 - W	17144-1000	129
8,600		•	•	•	◦			•	160	yellow/blue/green	ranger® W3 - W	17145-400	129
25,000		•	•	•	◦			•	180	white/black	turbomax® W6	17140	129
25,000		•	•	•	◦			•	180	white/black	turbomax® W6	17140-400	129
25,000		•	•	•	◦			•	180	white/black	turbomax® W6	17140-1000	129
27,300		•	•	•	◦			•	200	white/black	turbomax® W9	17141	129
27,300		•	•	•	◦			•	200	white/black	turbomax® W9	17141-400	129
27,300		•	•	•	◦			•	200	white/black	turbomax® W9	17141-1000	129
37,500		•	•	•	◦			•	200	white/black	turbomax® W12	17142	129
37,500		•	•	•	◦			•	200	white/black	turbomax® W12	17142-400	129
37,500		•	•	•	◦			•	200	white/black	turbomax® W12	17142-1000	129
23,100		•	•	•	◦			•	200	white/black	turbomax® braided rope D3	145121	130
23,100		•	•	•	◦			•	200	white/black	turbomax® braided rope D3	145121-400	130

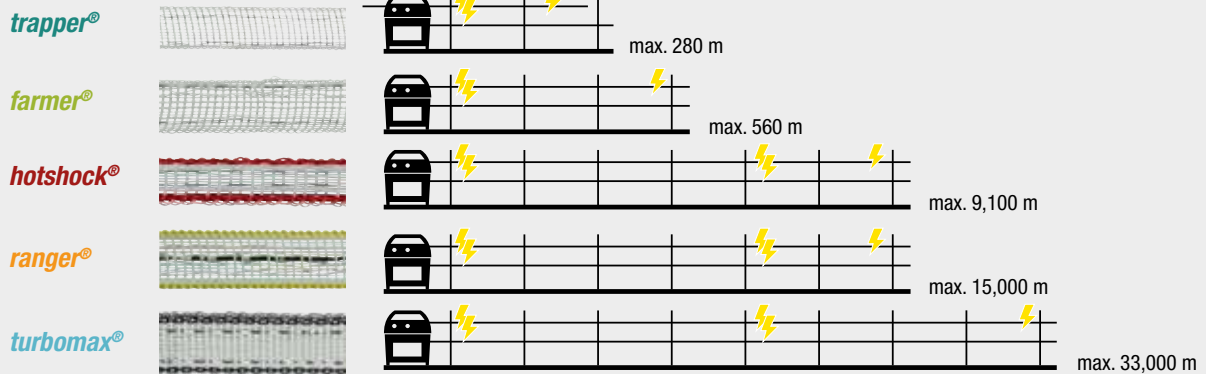


TIP:

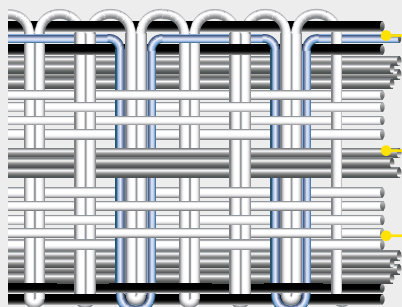
Your fence system should have stable corner and intermediate posts which simultaneously tension the electric fence tape and keep it at height. This keeps it straight and parallel to each other.

ELECTRIC FENCE TAPES

horizont electric fence tapes are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence tape for every individual application. When choosing the conductor material, pay attention to width and colour for optimum herding security.



Maximum fence lengths: The length specifications show the maximum possible fence length of a level without vegetation with an appropriately strong energiser.



Cross-connections ensure the consistent flow of current and optimum current conduction.

Bundled **TLD_{max}** - conductors ensure highest conductivity and high current flow.

Polyethylene threads ensure maximum durability and high breaking loads.

turbomax® electric fence tapes

*Fence length: Specification for simple fences with one conductor and without vegetation. Depending on the amount of vegetation, this will reduce the specified fence lengths. If using several fence conductors on several levels, longer fences are possible.





Electric fence tape trapper®

- Suitable for:**
- Short fences and strip grazing
- Advantage:**
- Monofilaments with high UV stability
 - Stainless steel conductor for good conductivity and highest bending strength
- Colour:**
- White: for more contrast to the surroundings and increased visibility in twilight and darkness

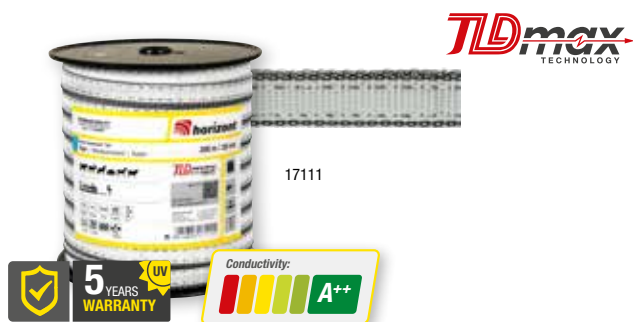
Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
17280	trapper® T10 - W	10 mm	250 m	210 m	~ 20 kg	3	0.15 mm	14.40 Ω/m	○	1	4 014803 459718



Electric fence tape farmer®

- Suitable for:**
- Short fences and strip grazing
- Advantage:**
- High breaking loads
 - Monofilaments with high UV stability
 - Stainless steel conductor for good conductivity and highest bending strength
- Colour:**
- White: for more contrast to the surroundings and increased visibility in twilight and darkness
 - Yellow/orange: good visibility
 - Green: blends in well with nature

Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
17451	farmer® T10 - W	10 mm	200 m	210 m	~ 40 kg	3	0.15 mm	14.40 Ω/m	○	1	4 014803 174512
17287	farmer® T10 - O	10 mm	200 m	210 m	~ 40 kg	3	0.15 mm	14.40 Ω/m	●●	1	4 014803 172877
17475	farmer® T20 - W	20 mm	200 m	280 m	~ 90 kg	4	0.15 mm	10.80 Ω/m	○	1	4 014803 174758
17272	farmer® T20 - W	20 mm	2 x 200 m	280 m	~ 90 kg	4	0.15 mm	10.80 Ω/m	○	1	4 014803 172723
17528	farmer® T20 - O	20 mm	200 m	280 m	~ 90 kg	4	0.15 mm	10.80 Ω/m	●●	1	4 014803 175281
17458	farmer® T40 - W	40 mm	200 m	560 m	~ 120 kg	8	0.15 mm	5.40 Ω/m	○	1	4 014803 174581



Electric fence tape turbomax®

- Suitable for:**
- Long to very long fences
- Advantage:**
- High conductivity ensures high herding security
 - Conductors of **TLDmax** are extremely weather-resistant
 - Cross-connections guarantee a continuous current flow and ensure optimum current conduction even in the event of conductor breakage
 - Polyethylene threads ensure maximum durability and high breaking loads
- Colour:**
- White: with black outer edges: for more contrast to the surroundings and increased visibility in twilight and darkness

Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
17110	turbomax® T12	12 mm	200 m	21,400 m	~ 60 kg	6	5 x 0.30 mm	1 x 0.20 mm	0.14 Ω/m	◐	1	4 014803 171108
17111	turbomax® T20	20 mm	200 m	20,000 m	~ 140 kg	8	7 x 0.25 mm	1 x 0.20 mm	0.15 Ω/m	◐	1	4 014803 171115
17112	turbomax® T40	40 mm	200 m	33,300 m	~ 240 kg	12	11 x 0.25 mm	1 x 0.20 mm	0.09 Ω/m	◐	1	4 014803 171122

Electric fence tape hotshock®

- Suitable for:** • Medium fence lengths
- Advantage:** • Greater durability due to additional corrosion protection
• Reinforced conductor material with higher breaking load
• Specifically for strong energisers (wildlife deterrent)
- Colour:** • White/blue: good visibility for animal and human



Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	TBmax	Resistance	Colour	Unit	EAN
17211	hotshock® T12	12 mm	200 m	8,600 m	~ 100 kg	6	0.30 mm	0.36 Ω/m		1	4 014803 467423

Electric fence tape ranger®

- Suitable for:** • Medium to long fences
- Advantage:** • High conductivity
• Polyethylene monofilaments for high tensile strength
• Bundled **TLDmax** - conductors for highest current flow
• High tensile loads can be absorbed due to particularly high and reinforced outside edges (only for 17121, 17122, 17124, 17125)
- Colour:** • White with yellow outside edges: For more contrast to the surroundings and increased visibility in twilight and darkness
• Yellow/blue/green: fluorescent effect, especially good visibility against darker backgrounds like forests
• Green: blends in well with nature
• Brown: blends in well with stable wooden fence situations

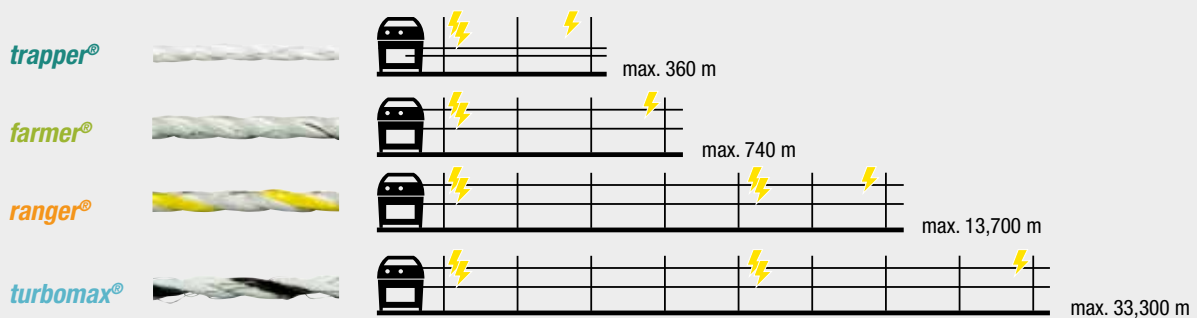


Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax	Resistance	Colour	Unit	EAN
17116	ranger® FLUO T12	12 mm	200 m	9,100 m	~ 60 kg	4	0.22 mm	0.33 Ω/m		1	4 014803 171160
17113	ranger® T12 - W	12 mm	200 m	9,100 m	~ 60 kg	4	0.22 mm	0.33 Ω/m		1	4 014803 171139
17114	ranger® T20 - W	20 mm	200 m	11,100 m	~ 120 kg	5	0.22 mm	0.27 Ω/m		1	4 014803 171146
17115	ranger® T40 - W	40 mm	200 m	15,000 m	~ 180 kg	8	0.20 mm	0.20 Ω/m		1	4 014803 171153
17121	ranger® T20 - W-E	20 mm	200 m	9,100 m	~ 150 kg	4	0.22 mm	0.33 Ω/m		1	4 014803 171214
17122	ranger® T20 - B-E	20 mm	200 m	9,100 m	~ 150 kg	4	0.22 mm	0.33 Ω/m		1	4 014803 171221
17125	ranger® T40 - B-E	40 mm	200 m	15,000 m	~ 260 kg	8	0.20 mm	0.20 Ω/m		1	4 014803 171252

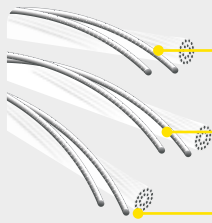


ELECTRIC FENCE ROPE

horizont electric fence ropes are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence rope for every individual application. When choosing the conductor material, observe the diameter and colour for optimum herding security.



Maximum fence lengths: The length specifications show the maximum possible fence length of a level without vegetation with an appropriately strong energiser.



The counter-rotating stranding ensures a high stability of the electric fence rope.

Individual strands are arranged so that they are well twisted into the rope. This ensures a safe spark-over.

Due to the complex stranding process, wires are always clearly visible and offer a high contact surface.



Electric fence rope farmer®

Suitable for:

- Short fences and strip grazing with little vegetation

Advantage:

- 462560: The elasticity of the horizont fence rope makes it ideal for use on pasture gates in combination with gate handles

Colour:

- White: for more contrast to the surroundings and increased visibility in twilight and darkness

Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
153372	farmer® R6	6 mm	200 m	740 m	~ 250 kg	6	0.20 mm	4.05 Ω/m	○	1	4 014803 438034
153372-400	farmer® R6	6 mm	400 m	740 m	~ 250 kg	6	0.20 mm	4.05 Ω/m	○	1	4 014803 438041
462560	farmer® stretch W3	8 mm	50 m	370 m	~ 100 kg	3	0.20 mm	8.10 Ω/m	◐	1	3 485630 025604

Electric fence rope ranger®

- Suitable for:** • Medium to long fences
- Advantage:** • High number of wires ensures high current flow
• Polyethylene threads with high tensile strength
- Colour:** • White: for more contrast to the surroundings and increased visibility in twilight and darkness
• Green: blends in well with nature



Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax TECHNOLOGY	Resistance	Colour	Unit	EAN
17182	ranger® R6	6 mm	200 m	13,700 m	~ 250 kg	6	0.22 mm	0.22 Ω/m	☉	1	4 014803 171825
17182-400	ranger® R6	6 mm	400 m	13,700 m	~ 250 kg	6	0.22 mm	0.22 Ω/m	☉	1	4 014803 438010

Electric fence rope turbomax®

- Suitable for:** • Long to very long fences with dense vegetation
- Advantage:** • The TLDmax conductors ensure highest conductivity and secure a high current flow
• High tensile strength for long outdoor use
• PE monofilaments for long durability
- Colour:** • White/black: for more contrast to the surroundings and increased visibility in twilight and darkness



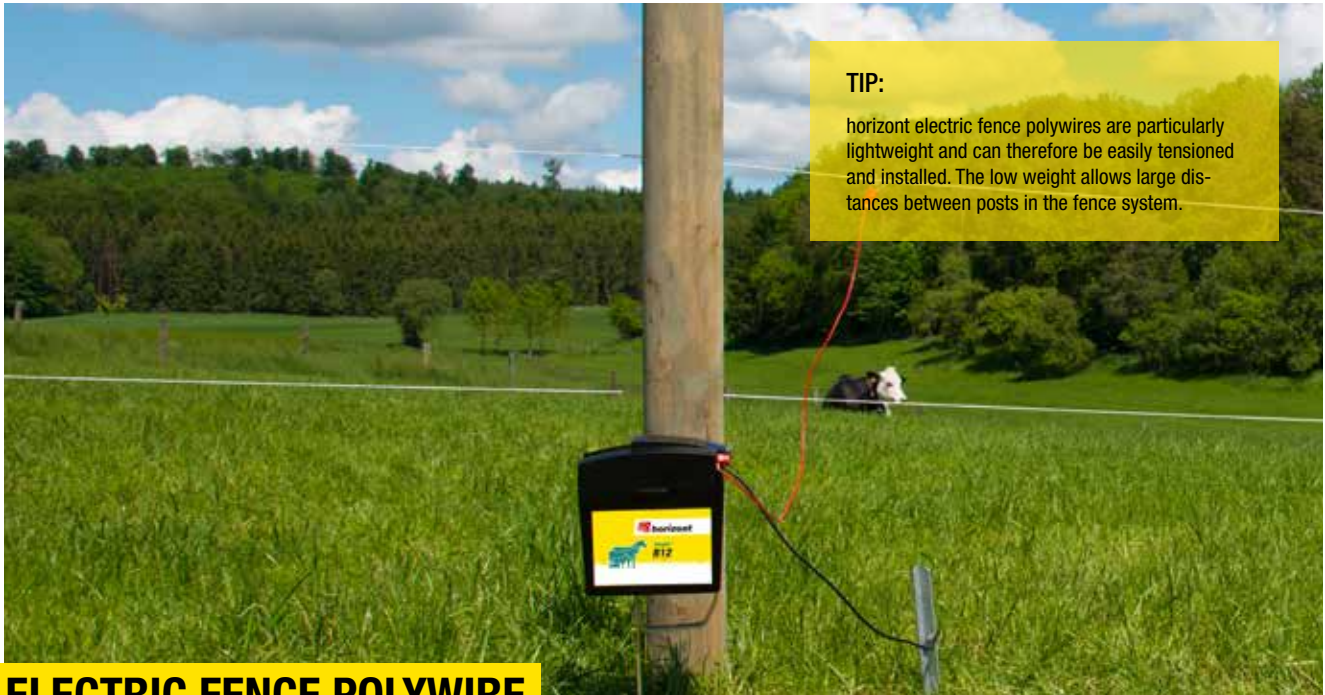
Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax TECHNOLOGY	Resistance	Colour	Unit	EAN
17180	turbomax® R6-PE	6 mm	200 m	17,700 m	~ 500 kg	6	0.25 mm	0.17 Ω/m	☉	1	4 014803 171801
17180-400	turbomax® R6-PE	6 mm	400 m	17,700 m	~ 500 kg	6	0.25 mm	0.17 Ω/m	☉	1	4 014803 431998
17180-800	turbomax® R6-PE	6 mm	800 m	17,000 m	~ 500 kg	6	0.25 mm	0.17 Ω/m	☉	1	4 014803 438003

Electric fence rope turbomax® braided rope

- Suitable for:** • Long to very long fences with dense vegetation
- Advantage:** • Mobile fences that are frequently assembled and dismantled
• Strong conductivity due to high number of mixed conductors (copper and stainless steel)
• High number of conductors ensures high current flow
• Braided structure of the plastic monofilaments ensures a high tensile strength and well protected conductor wires, thus achieving long-term resistance
• PE monofilaments for long durability
- Colour:** • White/black: for more contrast to the surroundings and increased visibility in twilight and darkness



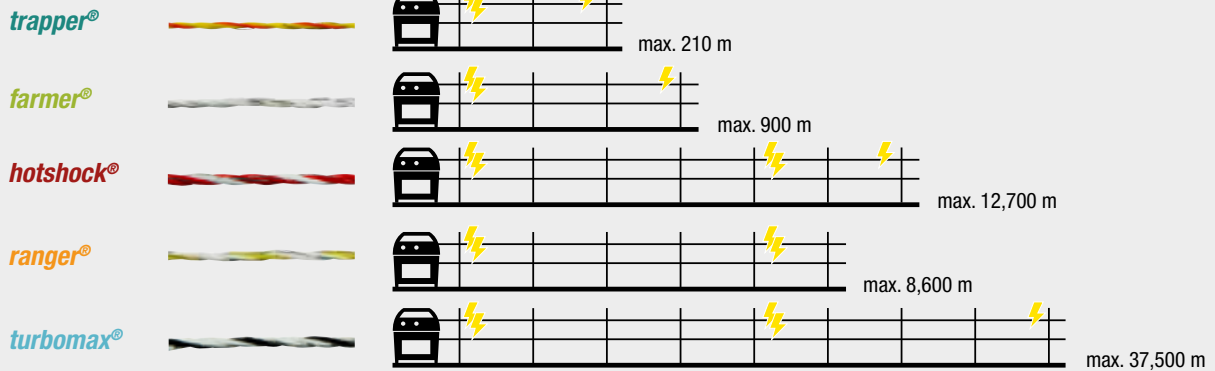
Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	∅ Stainless steel conductor	∅ Copper conductor	Resistance	Colour	Unit	EAN
145131-400	turbomax® braided rope D5.5	5.5 mm	400 m	33.3 km	~ 600 kg	9	6 x 0.20 mm	3 x 0.30 mm	0.09 Ω/m	☉	1	4 014803 467508



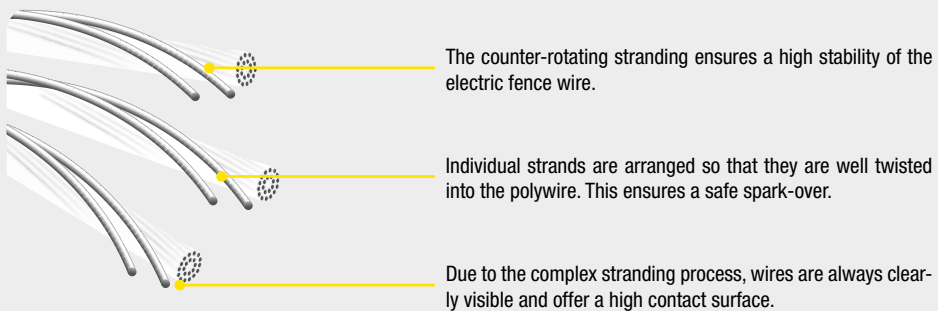
TIP:
 horizont electric fence polywires are particularly lightweight and can therefore be easily tensioned and installed. The low weight allows large distances between posts in the fence system.

ELECTRIC FENCE POLYWIRE

horizont electric fence polywires are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence polywire for every individual application. All horizont electric fence wires are clearly visible at twilight, which is important due to the small diameter.



Maximum fence lengths: The length specifications show the maximum possible fence length of a level without vegetation with a correspondingly powerful energiser.



Electric fence polywire trapper®

- Suitable for:** • Short fences and strip grazing
Advantage: • Simple quality optimal for the hobby sector
Colour: • Yellow/ orange: good visibility for animal and human



Art. No.	Designation	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
15567	trapper® W3	250 m	210 m	~ 30 kg	3	0.15 mm	14.4 Ω/m		1	4 014803 155672

Electric fence polywire farmer®

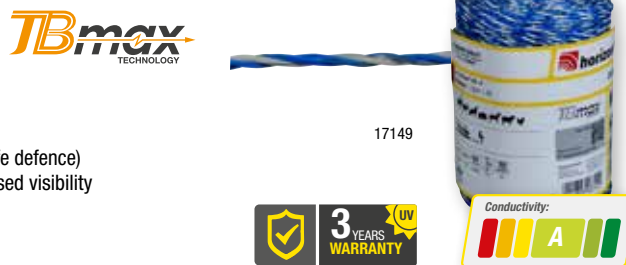
- Suitable for:** • Short to medium fences
Advantage: • Average breaking loads
 • Double the amount of monofilaments compared to a standard quality
Colour: • White: for more contrast to the surroundings and increased visibility in twilight and darkness
 • Yellow/orange: good visibility for animal and human



Art. No.	Designation	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Resistance	Colour	Unit	EAN
15347	farmer® W9 - W	250 m	900 m	~ 70 kg	9	0.18 mm	3.33 Ω/m		1	4 014803 153470
15277	farmer® W9 - W	400 m	900 m	~ 70 kg	9	0.18 mm	3.33 Ω/m		1	4 014803 152770
15282	farmer® W6 - W	250 m	600 m	~ 60 kg	6	0.18 mm	4.98 Ω/m		1	4 014803 152824
15283	farmer® W6 - W	400 m	600 m	~ 60 kg	6	0.18 mm	4.98 Ω/m		1	4 014803 152831
15345	farmer® W3 - O	250 m	300 m	~ 50 kg	3	0.18 mm	9.99 Ω/m		1	4 014803 153456

Electric fence polywire hotshock®

- Suitable for:** • Short to medium fences
Advantage: • 5 times higher conductivity than stainless steel
 • Longer durability through additional protection
 • Specifically for strong energisers (e.g. sheep protection, wildlife defence)
Colour: • White/blue: for more contrast to the surroundings and increased visibility in twilight and darkness



Art. No.	Designation	Reel	Max. fence length*	Breaking load	Number of conductors	TBmax TECHNOLOGY	Resistance	Colour	Unit	EAN
17149	hotshock® W9 - R	200 m	12,700 m	~ 120 kg	9	0.3 mm	0.3 Ω/m		1	4 014803 467409
17149-400	hotshock® W9 - R	400 m	12,700 m	~ 120 kg	9	0.3 mm	0.3 Ω/m		1	4 014803 467416



Electric fence polywire I ranger®

- Suitable for:** • Medium to long fences
- Advantage:** • High conductivity, high tensile strengths and safe and high current flow
- Colour:** • White/yellow: for more contrast to the surroundings and increased visibility in twilight and darkness
 • Orange/grey: good visibility for animal and human
 • Yellow/blue/green: fluorescent effect, especially good visibility against darker backgrounds like forests

Art. No.	Designation	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax TECHNOLOGY	Resistance	Colour	Unit	EAN
17143	ranger® W3 - 0	200 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	●●	1	4 014803 171436
17143-400	ranger® W3 - 0	400 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	●●	1	4 014803 437952
17143-1000	ranger® W3 - 0	1000 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	●●	1	4 014803 437969
17144	ranger® W3 - W	200 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	○●	1	4 014803 171443
17144-400	ranger® W3 - W	400 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	○●	1	4 014803 437976
17144-1000	ranger® W3 - W	1000 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	○●	1	4 014803 437983
17145-400	ranger® FLUO W3	400 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	●●●	1	4 014803 438058



Electric fence polywire I turbomax®

- Suitable for:** • Long to very long fences with dense vegetation
- Advantage:** • High conductivity and safe and high current flow
- Colour:** • White/yellow: for more contrast to the surroundings and increased visibility in twilight and darkness

Art. No.	Designation	Reel	Max. fence length*	Breaking load	Number of conductors	TLDmax TECHNOLOGY	Resistance	Colour	Unit	EAN
17140	turbomax® W6	200 m	25 km	~ 180 kg	6	0.30 mm	0.12 Ω/m	○●	1	4 014803 171405
17140-400	turbomax® W6	400 m	25 km	~ 180 kg	6	0.30 mm	0.12 Ω/m	○●	1	4 014803 437891
17140-1000	turbomax® W6	1000 m	25 km	~ 180 kg	6	0.30 mm	0.12 Ω/m	○●	1	4 014803 437907
17141	turbomax® W9	200 m	27.3 km	~ 200 kg	9	0.25 mm	0.11 Ω/m	○●	1	4 014803 171412
17141-400	turbomax® W9	400 m	27.3 km	~ 200 kg	9	0.25 mm	0.11 Ω/m	○●	1	4 014803 437914
17141-1000	turbomax® W9	1000 m	27.3 km	~ 200 kg	9	0.25 mm	0.11 Ω/m	○●	1	4 014803 437921
17142	turbomax® W12	200 m	37.5 km	~ 220 kg	12	0.25 mm	0.08 Ω/m	○●	1	4 014803 171429
17142-400	turbomax® W12	400 m	37.5 km	~ 220 kg	12	0.25 mm	0.08 Ω/m	○●	1	4 014803 437938
17142-1000	turbomax® W12	1000 m	37.5 km	~ 220 kg	12	0.25 mm	0.08 Ω/m	○●	1	4 014803 437945

*Fence length: Specification for simple fences with one conductor and without vegetation. Depending on the amount of vegetation, this will reduce the specified fence lengths. If using several fence conductors on several levels, longer fences are possible.

Electric fence polywire turbomax® braided wire

- Suitable for:**
- Long to very long fences with dense vegetation
 - Mobile fences that are frequently assembled and dismantled
- Advantage:**
- Strong conductivity due to high number of mixed conductors (copper and stainless steel)
 - High number of conductors ensures high current flow
 - Braided structure of the plastic monofilaments ensures a high tensile strength and well protected conductor wires, thus achieving long-term resistance
 - PE monofilaments for long durability
- Colour:**
- White/black: for more contrast to the surroundings and increased visibility in twilight and darkness



Art. No.	Designation	Ø	Reel	Max. fence length*	Breaking load	Number of conductors	Ø Stainless steel conductor	Ø Copper conductor	Resistance	Colour	Unit	EAN
145121	turbomax® braided wire D3	3 mm	200 m	23.1 km	~ 200 kg	9	6 x 0.15 mm	3 x 0.25 mm	0.13 Ω/m	☉	1	4 014803 467430
145121-400	turbomax® braided wire D3	3 mm	400 m	23.1 km	~ 200 kg	9	6 x 0.15 mm	3 x 0.25 mm	0.13 Ω/m	☉	1	4 014803 467447





TIP:

Electric fence wires are particularly suitable for electric permanent fences installations. Horizontal electric fence wires are characterized above all by their high conductivity and durability.

ELECTRIC FENCE WIRE

Horizontal electric fence wires are available in different series, which are characterized by the maximum fence length. Horizontal offers the appropriate electric fence wire for every individual application. For optimum herding security, observe the diameter and processing (solid or coiled wire) when choosing the conductor material.

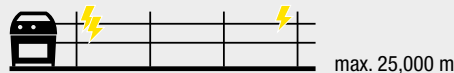
Original control wire



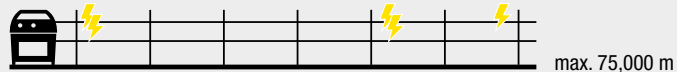
Steel wire



Stranded wire



Permanent fencing GALVADUR



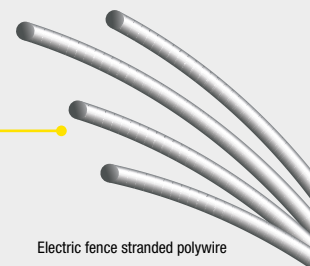
Maximum fence lengths: The length specifications show the maximum possible fence length of a level without vegetation with a correspondingly powerful energiser.



Electric fence solid wire

Horizontal offers electric fence solid wires with different diameters and highest conductivity. They are very easy to shape, are corrosion resistant, easy to process, enormously resilient and suitable for long fences.

The electric fence polywire consists of many different individual, e.g. galvanized wire strands. It is easy to process, is suitable for long fences and is particularly tear-resistant.



Electric fence stranded polywire

Electric fence wire | Original Control Wire

- Suitable for:** • Short to medium fence lengths
- Advantage:** • Safe voltage transition to the animal
• Plastic core ø 1.5 mm
• Wrapped with 2 special conductors (galvanized iron wire)
- Material:** • Iron

"Original Control"

15833S



Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	Resistance	Material	Unit	EAN
15833S	Dederon polywire	1.4 mm	1000 m	8.3 km	~ 30 kg	2	0.35 Ω/m	Iron	1	4 014803 426420

Electric fence wire | Iron

- Suitable for:** • Medium fence lengths
- Advantage:** • Solid wire
• High tear resistance up to 500 kg



Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	Resistance	Material	Unit	EAN
15036	Steel wire	1.8 mm	250 m	60.0 km	~ 500 kg	1	0.05 Ω/m	galvanized	1	4 014803 150363

Electric fence wire | Stranded wire

- Suitable for:** • Medium fence lengths
- Advantage:** • 7 wires wound into one conductor
• Wire is particularly flexible



Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	Resistance	Material	Unit	EAN
15009	Stranded wire	1.5 mm	200 m	25.0 km	~ 200 kg	7	0.12 Ω/m	galvanized	1	4 014803 150097
14134	Stranded wire	1.5 mm	200 m	25.0 km	~ 200 kg	7	0.12 Ω/m	galvanized	1	4 014803 141347
14134-400	Stranded wire	1.5 mm	400 m	25.0 km	~ 200 kg	7	0.12 Ω/m	galvanized	1	4 014803 438102

Electric fence wire | Permanent fencing GALVADUR

- Suitable for:** • Long fences
- Advantage:** • The utilised steel wire is thickly galvanized with a special zinc/aluminium long-term protection (95 % zinc and 5 % aluminium)
• This achieves a high level of corrosion protection and considerably extends the durability



Art. No.	Designation	Diameter	Reel	Max. fence length*	Breaking load	Number of conductors	Resistance	Material	Unit	EAN
15904	GALVADUR	1.6 mm	315 m	50.0 km	~ 200 kg	1	0.06 Ω/m	galvanized	1	4 014803 159045
15945	GALVADUR	2.5 mm	625 m	75.0 km	~ 500 kg	1	0.04 Ω/m	galvanized	1	4 014803 159458



Electric fence connectors

- Application:**
- Easy and safe to use in the electric fence tape
 - Simple re-tensioning possible
- Advantage:**
- Stable electric fence tape connector through one-piece galvanized metal brackets supported by break-proof plastic

Art. No.	Suitable for	Width	Material	Unit	EAN
14988C	Electric fence tapes	up to 20 mm	galvanized, plastic	10	4 014803 149886
14987C	Electric fence tapes	up to 40 mm	galvanized, plastic	5	4 014803 149879



40 mm

Electric fence tape connection

- Application:**
- Tape is easy and safe to attach to the gate handle
 - Simple re-tensioning possible
- Advantage:**
- Stable electric fence tape connector through one-piece galvanized metal brackets supported by break-proof plastic

Art. No.	Suitable for	Width	Material	Unit	EAN
14989C	Electric fence tapes	12-40 mm	galvanized, plastic	2	4 014803 149893



Electric fence connectors

- Application:**
- Easy to use in tape
 - Simple re-tensioning of tapes possible

Art. No.	Suitable for	Width	Material	Unit	EAN
15163C	Electric fence tapes	up to 20 mm	Aluminium	10	4 014803 405630
15164C	Electric fence tapes	up to 40 mm	Aluminium	5	4 014803 405647



Electric fence rope connector

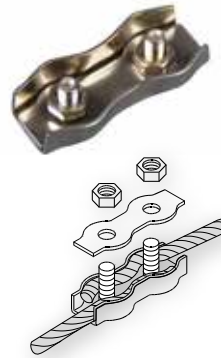
- Application:**
- Easy to close with a Phillips screwdriver
 - For connection of ropes to gate handles
 - For connection of insulators to start and end points

Art. No.	Suitable for	Diameter	Material	Unit	EAN
15314C	Electric fence ropes	5-6 mm	galvanized steel	5	4 014803 405913

Electric fence rope/polywire connector

- Application:** • For connection of electric fence polywires or ropes
Advantage: • Large contact surface

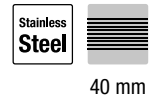
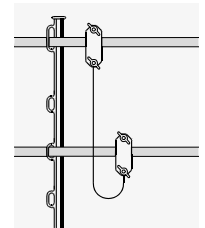
Art. No.	Suitable for	Diameter	Material	Unit	EAN
15063C	Electric fence polywires	1-4 mm	galvanized steel	10	4 014803 405388
15483C	Electric fence ropes	4-6 mm	galvanized steel	5	4 014803 405746
15363C	Electric fence ropes	7-8 mm	galvanized steel	3	4 014803 408396



Electric fence tape connecting cable

- Application:** • Screw-on
 • Connects overlapping tapes
 • Cable length 50 cm

Art. No.	Suitable for	Width	Material	Unit	EAN
10446C	Electric fence tapes	up to 40 mm	Stainless steel	1	4 014803 405562



Electric fence rope connecting cable

- Application:** • For the connection of electric fence ropes stretched over each other
 • Cable length 50 cm
Advantage: • All high voltage cables with double insulation

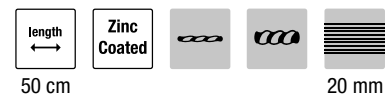
Art. No.	Suitable for	Diameter	Material	Unit	EAN
10596C	Electric fence ropes	5-6 mm	galvanized steel	1	4 014803 105967
10597C	Electric fence ropes	7-8 mm	Stainless steel	1	4 014803 105974



Electric fence polywire connecting cable

- Application:** • For the connection of electric fence polywires stretched over each other
 • Cable length 50 cm
Advantage: • All high voltage cables with double insulation

Art. No.	Suitable for	Material	Unit	EAN
10440C	Electric fence ropes and wires	galvanized steel, plastic	2	4 014803 405555





14197C



14356



Electric fence wire connector

- Application:**
- Can apply tension of up to 400 kg to wires
 - For connection of iron and steel wires

Art. No.	Suitable for	Material	Unit	EAN
14197C	Electric fence wires	hot-dip galvanized	10	4 014803 141972
14356	Electric fence wires	galvanized metal	10	4 014803 143563



Electric fence wire connector and tensioner Gripple

- Application:**
- Can also be used as wire tensioner
 - 4 times faster than knotting or such
 - Holds tension for a long time and is easy to re-tension
 - Easy to mount with Gripple tensioning tool with tension meter (15962)

Art. No.	Suitable for	Diameter	Material	Unit	EAN
15967	Electric fence solid wires	1.4-2.2 mm	galvanized	20	5 038006 020703
47GRIP0001	Electric fence solid wires	2.0-3.25 mm	galvanized	20	5 038006 020710



Electric fence rope tensioner

- Application:**
- Tensioner can be mounted directly into the fence material at any point of the fence
- Advantage:**
- Complete with locking bracket

Art. No.	Suitable for	Diameter	Material	Unit	EAN
15937C	Electric fence ropes and wires	1-8 mm	Aluminium	2	4 014803 405463
15937-25	Electric fence ropes and wires	1-8 mm	Aluminium	25	4 014803 413192



Electric fence polywire/rope tensioner

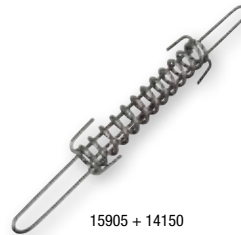
- Application:**
- Easy to use
 - Easy re-tensioning possible any time
 - High tensioning effect

Art. No.	Suitable for	Diameter	Material	Unit	EAN
14991	Electric fence ropes, polywires	6-13 mm	Polypropylene	2	4 014803 149916

Electric fence wire tensioner | Accessories

Application: • Keeps the wire taut during temperature fluctuations

Art. No.	Suitable for	Material	Unit	EAN
15905	Electric fence wires	Stainless steel	2	4 014803 159052
14150	Electric fence wires	hot-dip galvanized steel	2	4 014803 141507
15906	Electric fence wires	hot-dip galvanized steel	2	4 014803 159069
15907C	Electric fence wires	galvanized steel	5	4 014803 405487



Electric fence tensioning tool | Gripper

Application: • For tensioning the wire with the Gripper wire connector (15967, 47GRIP0001)
• Up to 400 kg tension can be applied to wires
• Regulation of the tension force through integrated tension measurement

Art. No.	Suitable for	Unit	EAN
15962	Electric fence wires	1	5 038006 012548



Electric fence tightening tool

Application: • For tightening the rope or wire in conjunction with the electric fence wire tensioner (Art. No. 15937C)

Art. No.	Suitable for	Material	Unit	EAN
15936	Electric fence wires	galvanized steel	1	4 014803 159366



Fencing pliers

Application: • All-purpose pliers for all work with wire

Art. No.	Suitable for	Material	Unit	EAN
15653	Electric fence wires	Steel	1	4 014803 156532





Reel for wire

- Application:** • For winding and unwinding
- Capacity:** • Electric fence wire GALVADUR Ø 2.5 mm (15945): up to max. 625 m
- Brake:** • Via a screw
- Advantage:** • Incl. supporting foot
- Material:** • Galvanized steel

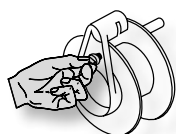
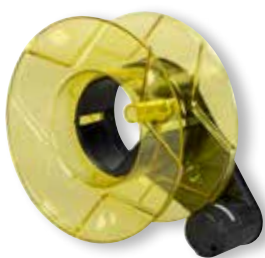
Art. No.	Unit	EAN
15933	1	4 014803 159335



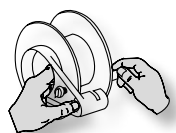
Reel | MAXI ROLLER 2000 & 4000

- Application:** • For winding and unwinding
- Capacity:** • Electric fence polywire: up to max. 2000 m (15013) / 4000 m (15839)
• Electric fence tape: up to max. 750 m (15013) / 1500 m (15839)
- Guide:** • Yes
- Brake:** • Yes
- Material:** • Plastic, with conical shaft

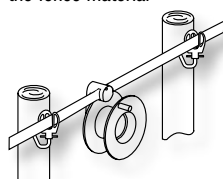
Art. No.	Designation	Unit	EAN
15013	Plastic reel MAXI ROLLER 2000	1	4 014803 150134
15031	Carrier to 15013	1	4 014803 150318
15839	Plastic reel MAXI ROLLER 4000	1	4 014803 158390
15840	Carrier to 15839	1	4 014803 158406



Locking the brake



Winding and unwinding the fence material



Suspension device:
Clipping the reel onto the fence material

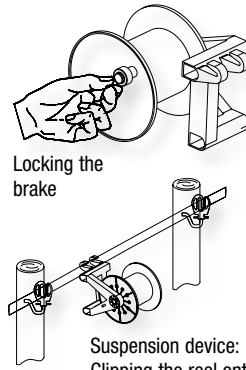
Reel | MINI ROLLER 300 PC

- Application:** • For winding and unwinding and for partitioning off pastures
- Well suited for mobile fences
- Capacity:** • Electric fence polywire: up to max. 300 m
- Electric fence tape: up to max. 100 m
- Guide:** • Yes
- Brake:** • Yes
- Material:** • Polycarbonate, with suspension device

Art. No.	Unit	EAN
10109	1	4 014803 101099

Reel | SUPER ROLLER 600

- Application:** • For winding and unwinding
Capacity: • Electric fence polywire: up to max. 600 m
 • Electric fence tape: up to max. 200 m
Guide: • Yes
Brake: • Yes
Material: • Plastic, with hooking in device



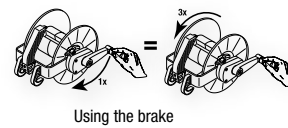
Suspension device:
Clipping the reel onto the fence material



Art. No.	Unit	EAN
14168	1	4 014803 141682

Reel | TURBO ROLLER 3: 1

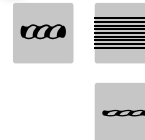
- Application:** • For winding and unwinding
Capacity: • Electric fence polywire: up to max. 800 m
 • Electric fence tape: up to max. 300 m
Guide: • Yes
Brake: • Yes (trailing and parking brake)
Material: • Impact-resistant plastic, robust steel crank and steel frame with suspension eyes
Advantages: • Roll-back lock, suspension eyes



Art. No.	Designation	Unit	EAN
13041	Plastic reel	1	4 014803 130419

Reel | TURBO ROLLER 1500

- Application:** • For winding and unwinding for 2- to 3-wire fences
Capacity: • Electric fence polywire: up to max. 800 m
 • Electric fence tape: up to max. 300 m
Guide: • Yes
Brake: • Yes
Material: • Plastic, with hooking in device



Art. No.	Designation	Unit	EAN
15340	Plastic reel	1	4 014803 153401
13042	Post stand, 117 cm, single	1	4 014803 130426
13043	Mounting part, single	1	4 014803 130433



TIP

For the assembly and dismantling of fences with four to five levels, you can use two post stands with mounted reels next to each other.

Reel with mounting part on wood post

Reel with mounting part on steel post

Mounting part single on steel post

Reels mounted on steel post





07

Posts

Every fencing system needs suitable posts to be firmly anchored in the ground and to withstand any weather situation. A fence that is securely stable is just as important for mobile fencing as for permanent fencing. The herding security of a fence system is decisive for the protection and safety of the animals to be fenced in – the right choice of corner post is particularly important here, as it must bear the high tensile forces of the fence system.

140 | Guide

142 | Product guide

144 | Plastic posts

152 | Fibreglass posts

152 | Steel posts

156 | Recycling, wood posts and accessories

157 | T-posts and accessories

THINGS TO KNOW ABOUT

POSTS

1. WHAT ARE THE DIFFERENT PURPOSES OF POSTS?

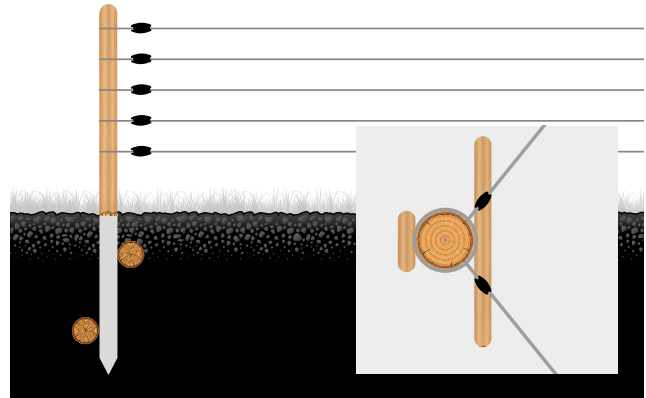
CORNER AND GATE POSTS

Corner and gate posts are usually made of wood or recycled material. They are used when the fence direction changes significantly, for example, if you need to integrate a change of direction / corner (more than 30 degrees) into your fence system. Plastic posts cannot sustain the high tensile forces of the fence system as corner posts and are therefore unsuitable for this area of application. Sturdy wood posts are useful; when assembling a corner, make sure you also use the right accessories; use insulators for wood and recycled posts from horizontal. Wood posts are also suitable as intermediate posts for long, straight fence sections; in this case, we recommend using them to make the fence system sufficiently stable and secure. If you integrate a gate into your fence, you should also position stable posts at the end of the fence/gate since the last post must bear the tensile force of the fence at the gate.

Regardless of whether you integrate a corner or gate into your fence system, the posts must be anchored deep in the ground to provide sufficient stability in the fence system. The more forces a post must withstand, the deeper it must be anchored in the ground and the larger the post diameter must be.

TIP: Corner, gate and intermediate posts are best anchored in the ground using an earth auger and a post rammer and should be twice as long as the fence is high.

Corner situation from the side view and top view



POSTS FOR CHANGING DIRECTION

If the direction of your fence changes (at an angle of 20 to 30 degrees), the post used to change direction need not be as strong as a corner or gate post. The forces acting on the post under this low inclination are not very strong. These poles should also be used in depressions or hills. The most suitable posts for this purpose are those that can be anchored in the ground, such as wooden posts. Recycled plastic posts from horizontal are an inexpensive alternative.

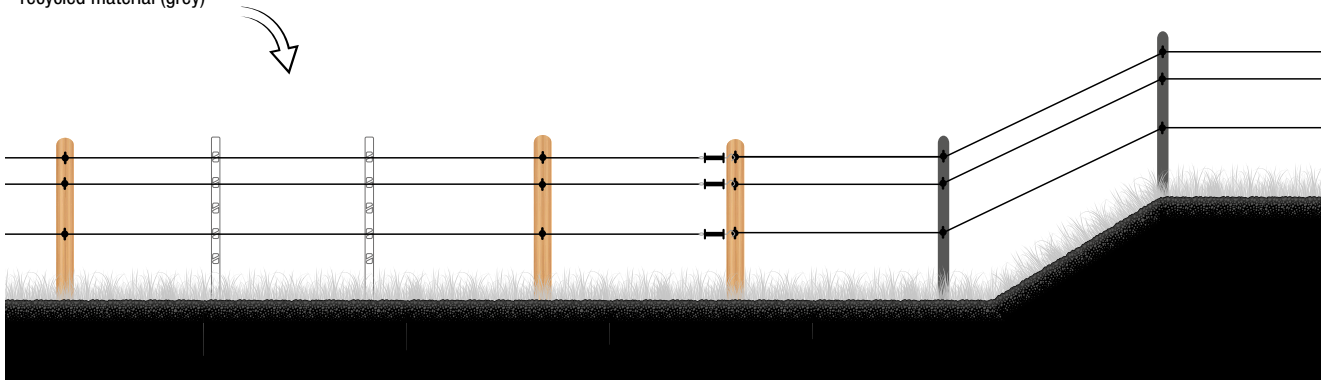
TIP: TILTING POSTS?

Do your posts often tip over? This would pose a high risk for you as a livestock owner and your animals. Line posts have only limited grip in the ground. The correct use of corner posts is therefore important, as they keep the tension secure and stable from corner post to corner post. For plastic posts, a wide and long earth spike is suitable for a better grip in the ground.

LINE POSTS

The function of the line posts is to keep the conductor material at a constant height. The wider the conductor material is (especially when using tapes), the closer together the posts must be positioned. In wind-prone areas, more posts should be placed along one section of the fence to ensure that the fence is stable enough. The utilised conductor material becomes heavier in heavy rain or even in winter, as it absorbs more moisture. This increased weight is not without risk for the herding security in the fence and should be taken into account. To avoid failures or voltage drops, provide a sufficient number of posts in your fence system as a preventive measure. The choice of the appropriate line post differs depending on whether you own a stationary fence or want to build a mobile fencing. For permanent fencing we recommend wood or recycled plastic posts. When utilising mobile fencing, you should use plastic, fibreglass or angle steel posts.

Example fence with corner/gate posts e.g. made of wood (brown), line posts e.g. made of plastic (white) and posts for changing direction e.g. made of recycled material (grey)



2. HOW HIGH AND HOW FAR APART MUST POSTS BE?

The height of your electric fence depends on the type of animal to be herded. Above all, the size of your animals and their jumping characteristics should be taken into account. If you also keep young animals in the pasture, your fence must be extended downwards.

As a general rule, the wider or heavier the conductor material, the closer together the posts must be in wind-prone regions. The distances also differ from the conductor material used.

TIP

When using plastic posts as line posts, you can easily transfer the heights for the insulators to the corner posts or posts for changes of direction by placing the plastic post in the ground next to the wood or recycling plastic post and transferring the height of the eyes to it.



3. HOW DOES THE INTERACTION OF POSTS AND FENCE LENGTHS WORK?

The following table helps to calculate fence lengths and the number of posts required. It is important to note that stable posts should be used for each corner and gate and where there are major changes in direction or depressions and hills.

Area	Examples of side lengths	Fence length
2,500 m ² / 0.25 ha	50 m x 50 m	200 m
5,000 m ² / 0.5 ha	71 x 71 m	284 m
7,500 m ² / 0.75 ha	87 x 87 m	348 m
10,000 m ² / 1.0 ha	100 x 100 m	400 m
15,000 m ² / 1.5 ha	122 x 122 m	488 m
20,000 m ² / 2.0 ha	141 x 141 m	564 m
30,000 m ² / 3.0 ha	173 x 173 m	692 m
50,000 m ² / 5.0 ha	224 x 224 m	896 m

EXAMPLE SITUATION: HORSE PASTURE AT THE EDGE OF THE FOREST WITHOUT TERRAIN



This pasture measures 306 m and includes a gate and must also bypass a large boulder. Therefore 6 stable corner posts are needed. For some of the long distances between the posts, line posts should be placed at intervals of 3 m, which keep 3 levels of wide tape at the same height. For a fence length of 300 m you will need 100 line posts, but this does not include the length of the gate (6 m below the boulder here).

Important icons for this chapter:

Cross Selling Icons:

These icons refer to products that are additionally required and are compatible with the selected product.



Insulator



Tape



Polywire



Conductor material



Wire



Rope

PRODUCT GUIDE

POSTS

PLASTIC POSTS

Application		Features			Insulator		Suitable for*				Product		
Corner post	Line post	Total height cm	Height above ground cm	Tread	additional-ly required	in-cludes eye	Tape 40 mm	Tape 20 mm	Rope 8 mm	Polywire 3.5 mm	Designation	Art. No.	Page
	•	72	60	ET		•		4		4	Plastic post trapper®	14839	146
	•	136	106	ET		•	2	5	5	5	Plastic post profi-line	15857	146
	•	157	142	SB		•	4	4	8	8	Stirrup post, white (20 pcs.)	15108	146
	•	157	142	SB		•	4	4	8	8	Stirrup post, white (5 pcs.)	15108-5	145
	•	157	142	SB		•	4	4	8	8	Stirrup post, green	15108GN-5	145
	•	115	100	SB		•	2	4	4	8	Stirrup post, white	15109-5	145
	•	71	58	ET		•	2	3	2	5	Plastic post ranger®	14471-5	147
	•	71	58	DT		•	2	3	2	5	Plastic post ranger®	14379-5	147
	•	108	95	ET		•	3	5	2	10	Plastic post ranger®	14472-5	148
	•	108	95	DT		•	3	5	2	10	Plastic post ranger®	14380-5	148
	•	138	125	ET		•	4	5	3	12	Plastic post ranger®	14473-5	148
	•	138	125	DT		•	4	5	3	12	Plastic post ranger®	14381-5	148
	•	150	132	ET		•	3	5		8	Plastic post ranger®	15663-10	148
	•	106	85	ET	•						Plastic post long life	15375	149
	•	146	125	ET	•						Plastic post long life	15376	149
	•	171	150	ET	•						Plastic post long life	15377	149
	•	169	153	ET		•	4	6	3	13	Plastic post turbomax®	15812	149
	•	78	55	ET		•	2	4		6	Plastic post turbomax® smart post	14490	152
	•	115	92	ET		•	3	5	2	10	Plastic post turbomax® smart post	14491	152
	•	145	122	ET		•	4	6	3	12	Plastic post turbomax® smart post	14492	152

FIBREGLASS POSTS

Application		Features			Insulator		Suitable for*				Product		
Corner post	Line post	Total height cm	Height above ground cm	Colour	additional-ly required	in-cludes eye	Tape 40 mm	Tape 20 mm	Rope 8 mm	Polywire 3.5 mm	Designation	Art. No.	Page
	•	124	99	yellow	•			•	•	•	Fibreglass post	14886	153
	•	135	105	white	•			•	•	•	Fibreglass post	14887	153



STEEL POSTS

Application		Features			Insulator		Suitable for*				Product		
Corner post	Line post	Total height cm	Height above ground cm	Tread	additionally required	in-cludes eye	Tape 40 mm	Tape 20 mm	Rope 8 mm	Polywire 3.5 mm	Designation	Art. No.	Page
	•	105	85	ET		•	•		•	•	Steel post Pigtail	141791	153
	•	115	95	DT	•					•	Angular steel post	155361	155
	•	120	100	DT	•					•	Angular steel post	15877	155
	•	165	145	DT	•					•	Angular steel post	152541	155
	•	107	82	DT		•				•	Oval steel post with metal eye	150561	155
	•	106	80	DT		•				•	Oval steel post with ring insulator	150551	155

RECYCLED PLASTIC & WOOD POSTS

Application		Features			Insulator		Suitable for				Product		
Corner post	Line post	Total height cm	Height above ground cm	Colour	additionally required	in-cludes eye	Tape 40 mm	Tape 20 mm	Rope 8 mm	Polywire 3.5 mm	Designation	Art. No.	Page
•	•	200	140	grey	•		•	•	•	•	Recycled plastic post	15243	157
•	•	175	120	grey	•		•	•	•	•	Recycled plastic post	15593	157
•	•	150	100	grey	•		•	•	•	•	Recycled plastic post	15151	157
•		230	150	Wood	•		•	•	•	•	Robinia post	14638	157
•		200	140	Wood	•		•	•	•	•	Robinia post	14637	157

T-POST

Application		Features			Insulator		Suitable for*				Product		
Corner post	Line post	Total height cm	Height above ground cm	Colour	additionally required	in-cludes eye	Tape 50 mm	Tape 20 mm	Rope 6 mm	Polywire 3.5 mm	Designation	Art. No.	Page
	•	150	115	black		•	•	•	•	•	T-post ECO	14550	158
	•	165	131	black		•	•	•	•	•	T-post ECO	14551	158
	•	180	146	black		•	•	•	•	•	T-post ECO	14552	158



Plastic post trapper®

- Suitable for:** • 4 x wide tapes up to 20 mm and 4 x polywires up to 3.5 mm
Total height: • 72 cm
Height above ground: • 60 cm

Art. No.	Colour	Unit	EAN
14839	black	20	4 014803 148391

Plastic post profi-line

- Eyes suitable for:** • 2 x wide tapes up to 40 mm, 5 x wide tapes up to 20 mm, 5 x rope up to 8 mm, 5 x polywires up to 3.5 mm and 5 x wires up to 3.5 mm
Total height: • 136 cm
Height above ground: • 116 cm
Earth spike: • 20 cm, Ø 9 mm
Tread: • Single tread

Art. No.	Colour	Unit	EAN
15857	white	5	4 014803 158574

Stirrup post

- Eyes suitable for:** • 4 x wide tapes up to 40 mm, 4 x wide tapes up to 20 mm, 8 x rope up to 8 mm, 8 x polywires up to 3.5 mm and 8 x wires up to 3.5 mm
Total height: • 157 cm
Height above ground: • 142 cm
Earth spike: • 15 cm, Ø 8 mm
Tread: • Stirrup step

Art. No.	Colour	Unit	EAN
15108	white	20	4 014803 151087
NEW 15108-5	white	5	4 014803 323606
15108GN-5	green	5	4 014803 323613

- Eyes suitable for:** • 2 x electric fence tape up to 40 mm, 4 x electric fence tape up to 20 mm, 4 x electric fence rope up to 8 mm and up to 8 polywires
Total height: • 115 cm
Height above ground: • 100 cm
Earth spike: • 15 cm, Ø 8 mm
Tread: • Stirrup step

Art. No.	Colour	Unit	EAN
15109-5	white	5	4 014803 323620

Plastic post

- The unique eye construction allows easy insertion of fence material and prevents it from slipping out.

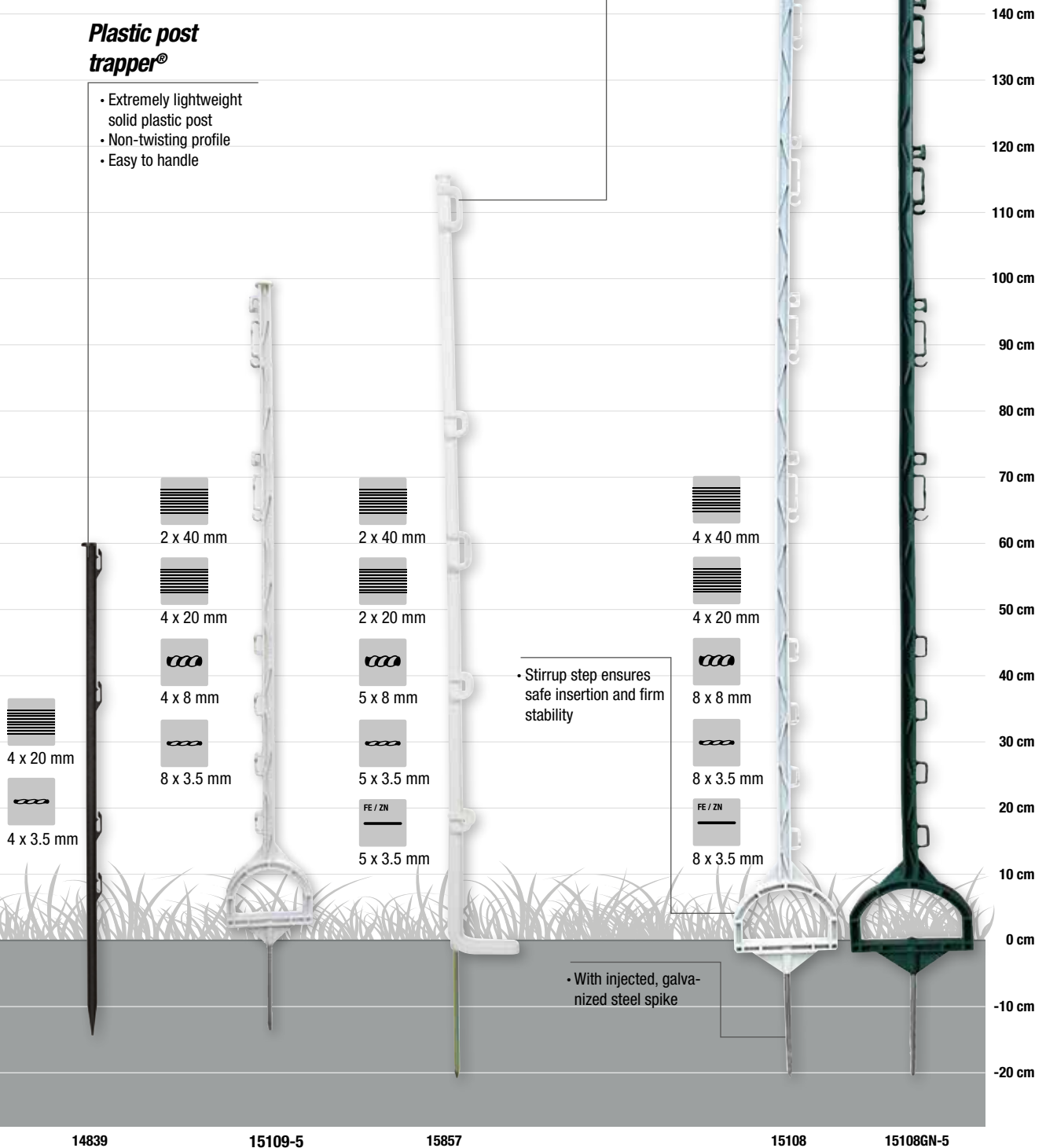


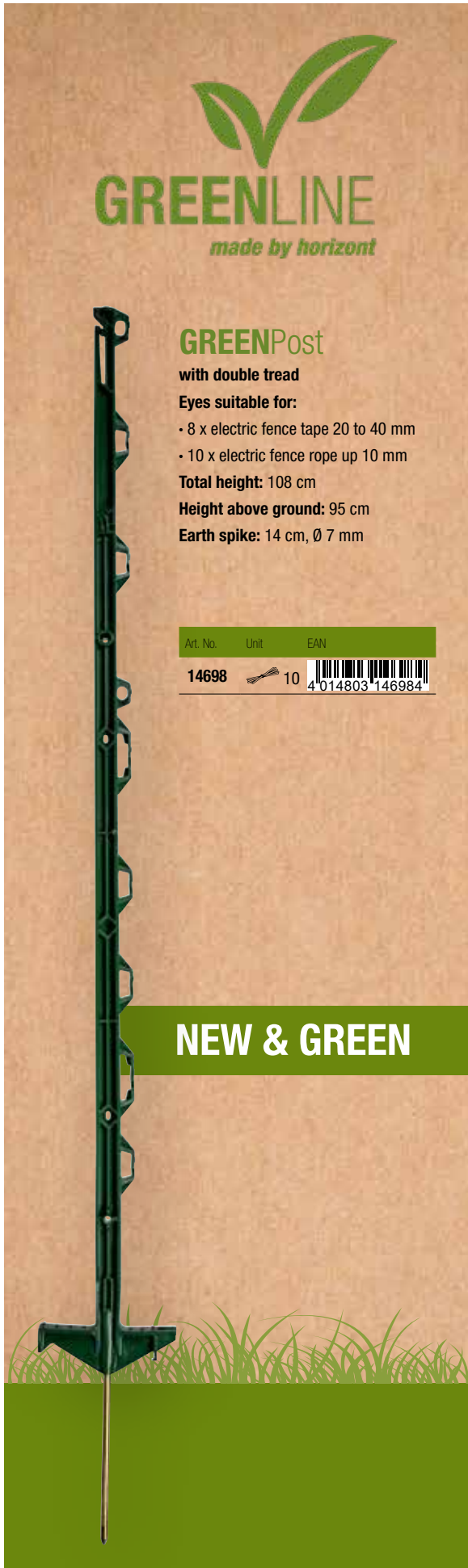
Plastic post trapper®

- Extremely lightweight solid plastic post
- Non-twisting profile
- Easy to handle

Stirrup post

- Sturdy design
- Of glass fibre reinforced polypropylene
- Reinforced, twist-free profile





GREENPost

with double tread

Eyes suitable for:

- 8 x electric fence tape 20 to 40 mm
- 10 x electric fence rope up 10 mm

Total height: 108 cm

Height above ground: 95 cm

Earth spike: 14 cm, Ø 7 mm

Art. No.	Unit	EAN
14698	10	4 014803 146984

NEW & GREEN

Plastic post ranger®

- Eyes suitable for:** • 2x wide tape up to 40 mm, 3x wide tape up to 20 mm, 5x polywire up to 3.5 mm
- Total height:** • 71 cm
- Height above ground:** • 58 cm
- Earth spike:** • 13 cm, Ø 7 mm

Art. No.	Colour	Tread	Unit	EAN
14471-5	white	Single tread	5	4 014803 465719
14379-5	white	Double tread	5	4 014803 465832
14379-5GN	green	Double tread	5	4 014803 476647

- Eyes suitable for:** • 3x wide tape up to 40 mm, 5x wide tape up to 20 mm, 2x rope up to 8 mm, 10x polywire up to 3.5 mm
- Total height:** • 108 cm
- Height above ground:** • 95 cm
- Earth spike:** • 13 cm, Ø 8 mm

Art. No.	Colour	Tread	Unit	EAN
14472-5	white	Single tread	5	4 014803 465733
14472-10	white	Single tread	10	4 014803 465740
14380-5	white	Double tread	5	4 014803 465856
14380-5GN	green	Double tread	5	4 014803 465870

- Eyes suitable for:** • 4x wide tape up to 40 mm, 5x wide tape up to 20 mm, 3x rope up to 8 mm, 12x polywire up to 3.5 mm
- Total height:** • 138 cm
- Height above ground:** • 125 cm
- Earth spike:** • 13 cm, Ø 7 mm

Art. No.	Colour	Tread	Unit	EAN
14473-5	white	Single tread	5	4 014803 465771
14473-10	white	Single tread	10	4 014803 465788
14381-5	white	Double tread	5	4 014803 465894
14381-5GN	green	Double tread	5	4 014803 465917
14381-10	white	Double tread	10	4 014803 465900

- Eyes suitable for:** • 3 x wide tapes up to 40 mm, 5 x wide tapes up to 20 mm and 8 x polywires up to 3.5 mm
- Total height:** • 156 cm
- Height above ground:** • 132.5 cm
- Earth spike:** • 24 cm, Ø 8 mm

Art. No.	Colour	Single tread	Unit	EAN
15663-10	white	Single tread	10	4 014803 465818

EXCLUSIVE ADVANTAGES OF THE NEW PLASTIC POSTS:



Additional lugs

back-friendly guying of the nets and ensures that the post does not twist in the ground

The post has a particularly stable tread

Plastic post ranger®

High rigidity at low weight

Fits

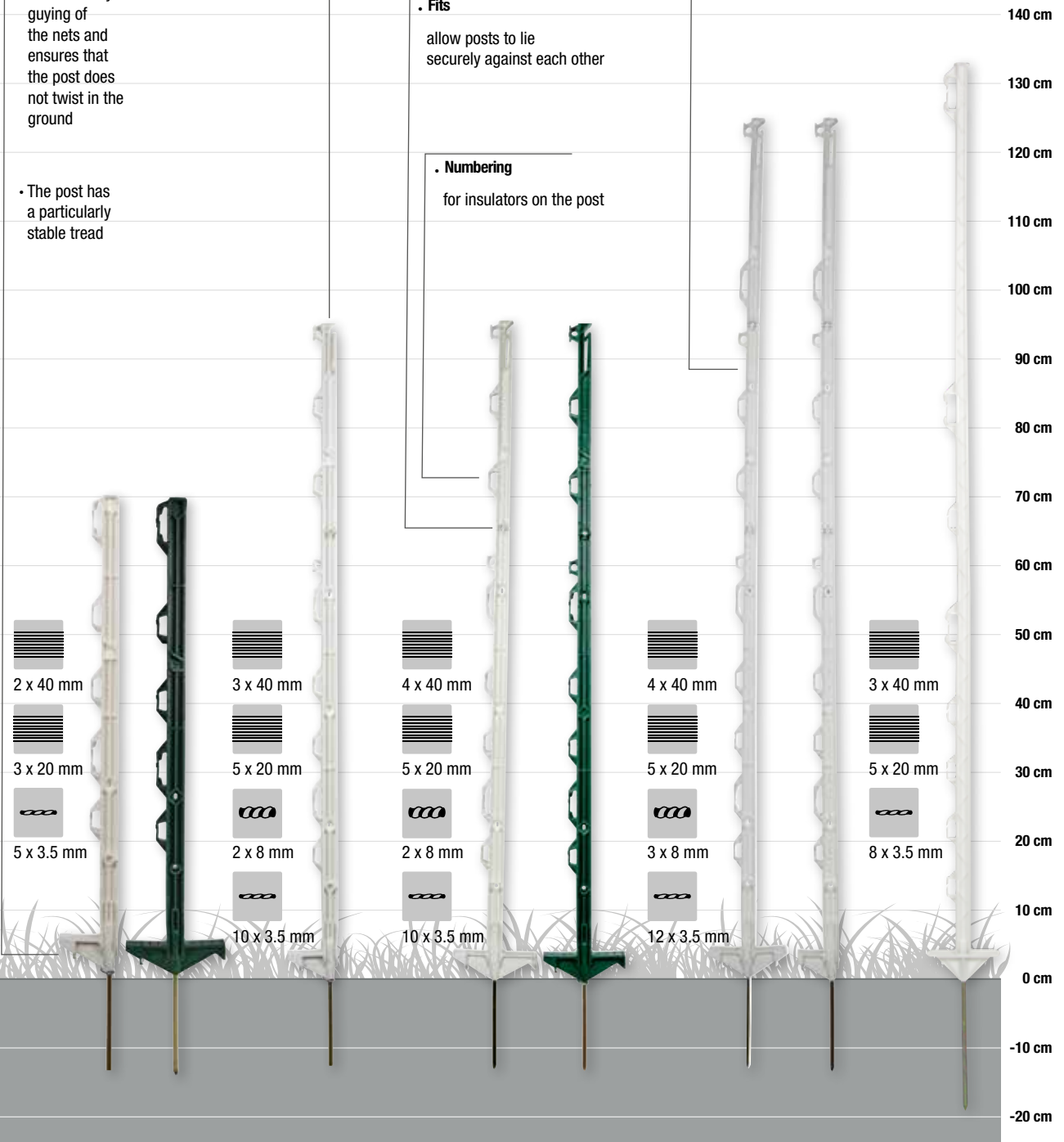
allow posts to lie securely against each other

Numbering

for insulators on the post



Additional ribs in lengthwise direction



14471-5

14379-5GN

14472-5

14380-5

14380-5GN

14381-5

14473-5

15663-10





Plastic post long life

- Suitable for:** • Insulators for clamping and all types of conductor material
- Total height:** • 106 cm
- Height above ground:** • 85 cm
- Earth spike:** • 20 cm, Ø 8 mm
- Tread:** • Single tread
- Diameter:** • Ø 19 mm

Art. No.	Colour	Unit	EAN
15375	white	 25	 4 014803 153753

- Suitable for:** • Insulators for clamping and all types of conductor material
- Total height:** • 146 cm
- Height above ground:** • 125 cm
- Earth spike:** • 21 cm, Ø 9 mm
- Tread:** • Single tread
- Diameter:** • Ø 19 mm

Art. No.	Colour	Unit	EAN
15376	white	 10	 4 014803 153760

- Suitable for:** • Insulators for clamping and all types of conductor material
- Total height:** • 171 cm
- Height above ground:** • 150 cm
- Earth spike:** • 21 cm, Ø 9 mm
- Tread:** • Single tread
- Diameter:** • Ø 19 mm

Art. No.	Colour	Unit	EAN
15377	white	 10	 4 014803 153777

Plastic post turbomax®

- Eyes suitable for:** • 4 x wide tapes up to 40 mm, 6 x wide tapes up to 20 mm, 3 x rope up to 8 mm, 13 x polywires up to 3.5 mm
- Total height:** • 169 cm
- Height above ground:** • 153 cm
- Earth spike:** • 16 cm, Ø 9 mm
- Tread:** • Single tread

Art. No.	Colour	Unit	EAN
15812	white	 10	 4 014803 158123

PLASTIC POST LONG LIFE - A GOOD CHOICE!



- Very high durability – made of a high-quality special plastic, therefore frost-proof
- No seams, as the post is cast in one piece

- Insulators can be individually adjusted in number and height
- Post is sealed at top – water cannot enter

Plastic post turbomax®

- Transposed twist-free profile
- Cast from one mould

PRODUCT TIP

Insulators are particularly suitable for screwing or clamping / clipping



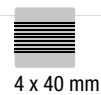
15481

15480

Plastic post long life

- A strong, galvanised tread frame provides good stability in hard ground and enables easy insertion into ground
- Continuous welding of the post instead of spot welding makes the earth spike stable

- Eyes are opposite tread – free area for better insertion
- Additional insulator at base of post for insertion of earth conductor for better herding security
- An additionally reinforced and rounded tread frame with fluting ensures a firm tread



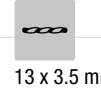
4 x 40 mm



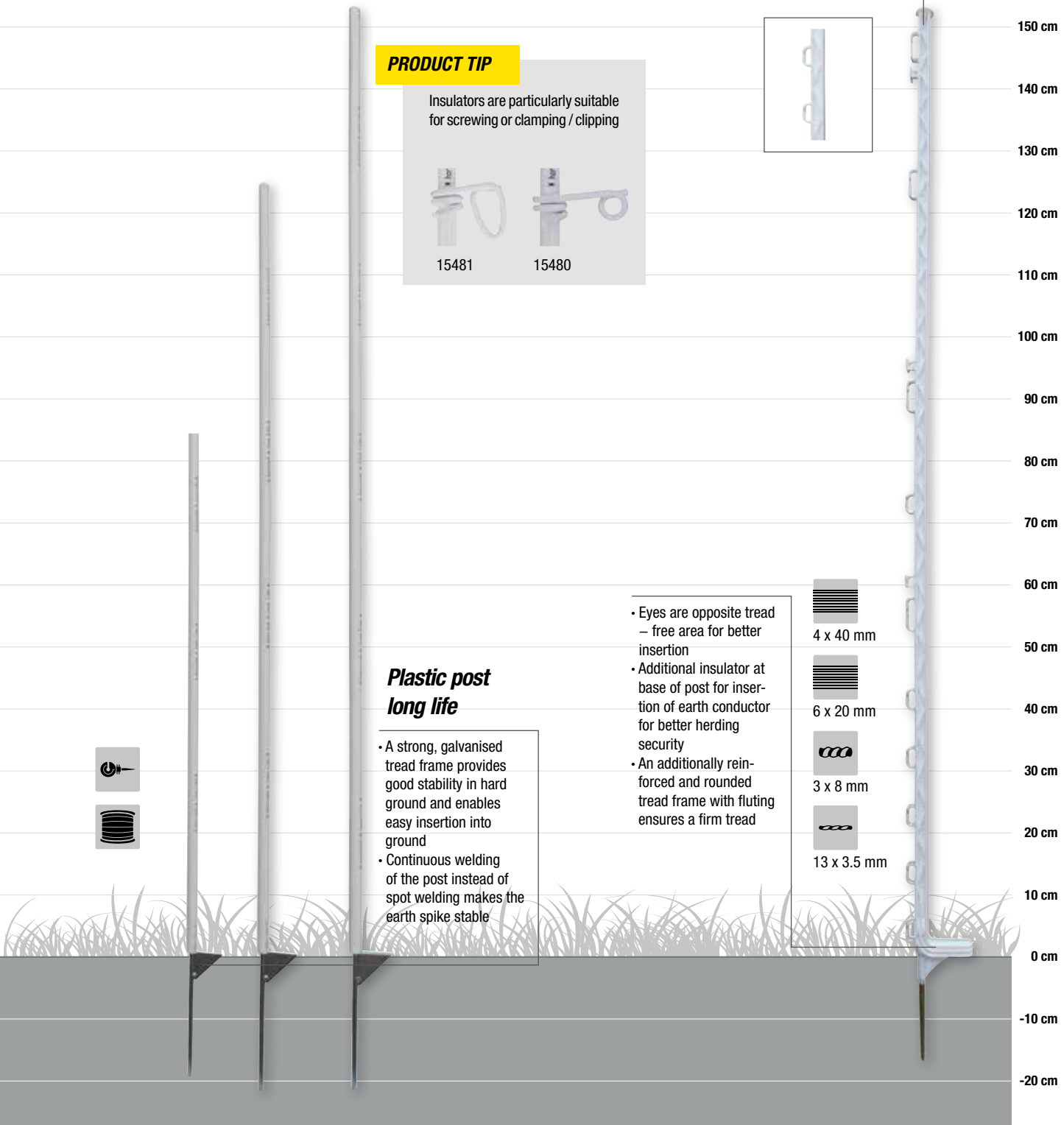
6 x 20 mm



3 x 8 mm



13 x 3.5 mm



15375

15376

15377

15812







Plastic post turbomax® smart post





- Eyes suitable for:** - 2 x wide tapes up to 40 mm, 4 x wide tapes up to 20 mm and 6 x polywires up to 3.5 mm
- Total height:** - 78 cm
- Height above ground:** - 55 cm
- Earth spike:** - 23 cm, Ø 9 mm
- Tread:** - Single tread

Art. No.	Colour	Unit	EAN
14490-5	white	 5	4 014803 450180
14490-5GN	green	 5	4 014803 450210

- Eyes suitable for:** - 3 x wide tapes up to 40 mm, 5 x wide tapes up to 20 mm, 2 x rope up to 8 mm, 10 x polywires up to 3.5 mm
- Total height:** - 115 cm
- Height above ground:** - 92 cm
- Earth spike:** - 23 cm, Ø 9 mm
- Tread:** - Single tread

Art. No.	Colour	Unit	EAN
14491-5	white	 5	4 014803 450197
14491-10	white	 10	4 014803 144911
14491-5GN	green	 5	4 014803 450227
14491-10GN	green	 10	4 014803 450258

- Eyes suitable for:** - 4 x wide tapes up to 40 mm, 6 x wide tapes up to 20 mm, 3 x rope up to 8 mm, 12 x polywires up to 3.5 mm
- Total height:** - 145 cm
- Height above ground:** - 122 cm
- Earth spike:** - 23 cm, Ø 9 mm
- Tread:** - Single tread

Art. No.	Colour	Unit	EAN
14492-5	white	 5	4 014803 450203
14492-10	white	 10	4 014803 144928
14492-5GN	green	 5	4 014803 450234
14492-10GN	green	 10	4 014803 450265

PLASTIC POST TURBOMAX® SMART POST - WITH STRONG ADVANTAGES:



Cross-ribbing in post provides stability, so it can be subjected to higher tensile forces and is difficult to bend

An **additionally reinforced and rounded tread** frame with fluting ensures a firm tread and prevents accidental slipping off

Two insulators at the post tip ensure optimum utilisation of the post length when using polywire, rope or tape up to 40 mm

The **numbering** of the eyes simplifies fence assembly, especially for large pastures

A stable, extra thick galvanized earth **spike** (9 mm diameter, 23 cm length) injected into the post guarantees high durability and ensures secure stability

Plastic post turbomax® smart post

- Of high-quality polypropylene with improved stability and impact resistance
- The shape of the post is based on high, tapered towers; this form provides particularly good stability
- Various designed, extremely stable eyes for tapes, ropes and polywires, suitable for any fence material

2 x 40 mm
4 x 20 mm
6 x 3.5 mm

3 x 40 mm
5 x 20 mm
2 x 8 mm
10 x 3.5 mm

4 x 40 mm
6 x 20 mm
3 x 8 mm
12 x 3.5 mm

14490

14490GN

14491

14491GN

14492

14492GN

130 cm
120 cm
110 cm
100 cm
90 cm
80 cm
70 cm
60 cm
50 cm
40 cm
30 cm
20 cm
10 cm
0 cm
-10 cm
-20 cm





Fibreglass post

- Suitable for:** • Insulators for wide tapes up to 20 mm, rope up to 8 mm and polywires up to 3.5 mm
- Total height:** • 124 cm
- Height above ground:** • 99 cm
- Tread:** • Single tread
- Diameter:** • Ø 12 mm



Art. No.	Colour	Unit	EAN
14886	yellow	 10	 4 014803 148865

- Suitable for:** • Insulators for wide tapes up to 20 mm, rope up to 8 mm and polywires up to 3.5 mm
- Total height:** • 135 cm
- Height above ground:** • 105 cm
- Diameter:** • Ø 10 mm

Art. No.	Colour	Unit	EAN
14887	white	 25	 4 014803 148872

Steel post Pigtail

- Suitable for:** • 1 x wide tape up to 40 mm, 1 x rope up to 8 mm or 1 x polywire up to 3.5 mm and insulators for screwing on and clamping/clipping for all types of conductor material
- Total height:** • 105 cm
- Height above ground:** • 85 cm
- Earth spike:** • Ø 7 mm
- Tread:** • Single tread
- Diameter:** • Ø 7 mm

Art. No.	Colour	Material	Unit	EAN
141791	white	Steel, galvanized	 30	 4 014803 453914

PRODUCT TIP

Insulators are particularly suitable for clamping / clipping



14904C



17801F

Fibreglass post

- Extremely stable and lightweight
- Particularly easy to handle in terrain
- Insulators can be individually adjusted in number and height

PRODUCT TIP

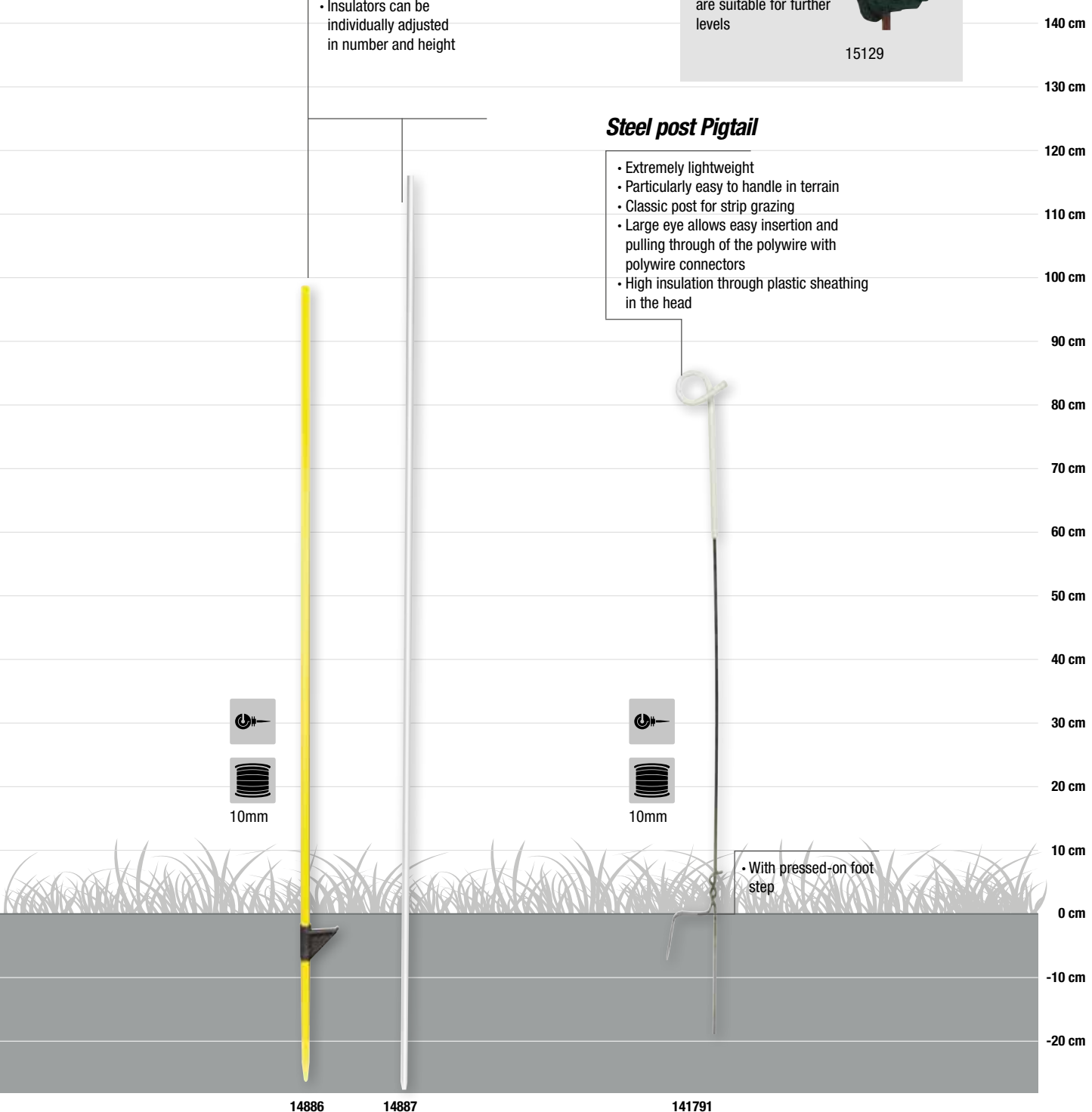
Additional insulators for screwing down are suitable for further levels



15129

Steel post Pigtail

- Extremely lightweight
- Particularly easy to handle in terrain
- Classic post for strip grazing
- Large eye allows easy insertion and pulling through of the polywire with polywire connectors
- High insulation through plastic sheathing in the head



14886

14887

141791





Angular steel post

- Suitable for:** • Insulators with split pin or metric thread for polywires up to 3.5 mm
- Total height:** • 115 cm
- Height above ground:** • 95 cm
- Tread:** • Double tread
- Wall thickness:** • 2 mm

Art. No.	Colour	Design	Unit	EAN
155361	red	4 bore holes	10	4 014803 155368

- Suitable for:** • Insulators with split pin or metric thread for polywires up to 3.5 mm
- Total height:** • 120 cm
- Height above ground:** • 100 cm
- Tread:** • Double tread
- Wall thickness:** • 3 mm

Art. No.	Colour	Design	Unit	EAN
15877	red	4 bore holes	10	4 014803 011794

- Suitable for:** • Insulators with split pin or metric thread for polywires up to 3.5 mm
- Total height:** • 165 cm
- Height above ground:** • 145 cm
- Tread:** • Double tread
- Wall thickness:** • 3 mm

Art. No.	Colour	Design	Unit	EAN
152541*	red	6 bore holes	10	4 014803 152541

Oval steel post with metal eye

- Eyes suitable for:** • 1 x polywires up to 3,5 mm and insulators for screwing on and clamping/clipping for polywires up to 3.5 mm
- Total height:** • 107 cm
- Height above ground:** • 82 cm
- Tread:** • Double tread

Art. No.	Colour	Design	Unit	EAN
150561	red	with metal eye	25	4 014803 432810

Oval steel post with ring insulator

- Eyes suitable for:** • 1 x polywires up to 3,5 mm and insulators for screwing on and clamping/clipping for polywires up to 3.5 mm
- Total height:** • 106 cm
- Height above ground:** • 80 cm
- Tread:** • Double tread

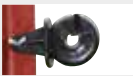
Art. No.	Colour	Design	Unit	EAN
150551	red	with ring insulator	25	4 014803 432803

Angular steel post

- Extremely stable and durable post
- High stability and secure anchoring in the ground due to angle profile

PRODUCT TIP

Insulators with metric thread or for clamping/clipping are particularly suitable



158052



152932

PRODUCT TIP

Additional insulators for screwing down are suitable for further levels



Oval steep post

- With insulator
- Of twist-free spring steel

- Secure stability due to pressed on tread plate on the post

- Tread frame is through-welded



155361

15877

152541

150561

150551





Head milled cylindrical-ly – reduces splintering of the wood when driving in



NEW Robinia post / natural, rough debarked

- Permanent fencing post of heavy natural wood with high life expectancy
- Natural, therefore ecologically safe
- Weatherproof and durable
- Natural protection against weather, fungi and insects
- Sharpened & rough debarked
- **Please note: Sold only by the pallet!**

Suitable for: • Insulators for screwing in, screwing on and nailing on
Total height: • 230 cm
Height above ground: • 150 cm
Diameter: • Ø 15 cm

Art. No.	Total height	Unit	EAN
14638	230 cm	30	4 014803 146380

Suitable for: • Insulators for screwing in, screwing on and nailing on
Total height: • 200 cm
Height above ground: • 140 cm
Diameter: • Ø 7 cm

Art. No.	Total height	Unit	EAN
14637	200 cm	150	4 014803 146373



with prong

14638
14367

YOUR ADVANTAGE:

- Processing with common tools (post does not splinter)
- Manufactured of recycled plastics – can be recycled again
- Unlimited durability guaranteed
- Individual adjustment of holes
- Impregnation not necessary – water cannot enter the post



Recycled plastic post*

Suitable for: • Insulators for screwing in, screwing on and nailing on
Total height: • 200 cm
Height above ground: • 140 cm
Diameter: • Ø 8 cm
Please note: Sold only by the pallet!

Art. No.	Colour	Unit	EAN
15243	grey	60	4 014803 152435

Suitable for: • Insulators for screwing in, screwing on and nailing on
Total height: • 175 cm
Height above ground: • 120 cm
Diameter: • Ø 6 cm
Please note: Sold only by the pallet!

Art. No.	Colour	Unit	EAN
15593	grey	125	4 014803 155931

Suitable for: • Insulators for screwing in, screwing on and nailing on
Total height: • 150 cm
Height above ground: • 100 cm
Diameter: • Ø 4.5 cm
Please note: Sold only by the pallet!

Art. No.	Colour	Unit	EAN
15151	grey	165	4 014803 151513



with prong

15243
15593
15151

T-post ECO 







Very robust posts of recycled material, durable and resilient!

The ECO T-post is manufactured from recycled grade ST42 steel and is lacquered. The anchor plate extends across three "knobs", which gives the post a good hold even in soft soils. A wide variety of insulators can be attached to the T-profile to accommodate the desired conductor material. This makes the post suitable for wire, rope, polywire and wide tape.

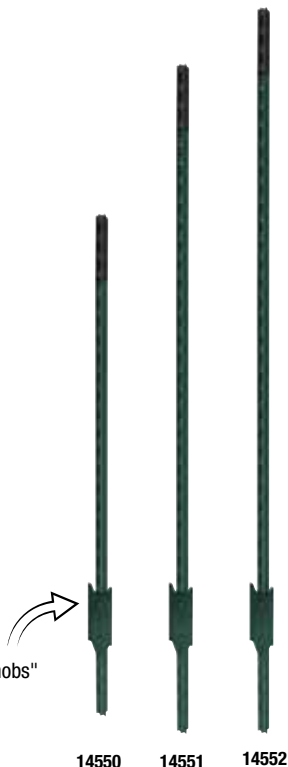
Eyes suitable for: • Wide tape up to 50 mm, rope up to 6 mm

Weight: • 2.7 kg

Please note: Sold only by the pallet!

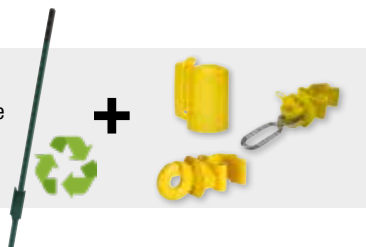
Art. No.	Total height	Height above ground	Unit	EAN
14550	1.50 m	1.15 m	 200	 4 014803 476180
14551	1.65 m	1.31 m	 200	 4 014803 476197
14552*	1.80 m	1.46 m	 200	 4 014803 476203

Good hold in soft soils thanks to anchor plate with three "knobs"




PRODUCT TIP

The right insulators for the T-post can be found in the chapter Insulators.



Post rammer with handle


- Enables easy insertion of the T-post

Art. No.	Unit	EAN
14557	1	 4 014803 476258



T-post extractor

- For easy removal of T-posts
- Can be gripped from front and back
- Insulators can stay on the post

Art. No.	Unit	EAN
14558	1	 4 014803 476265





08

Insulators

Sufficient herding voltage is of great importance for the operation of a electric fence. The insulators should have a very high insulating capacity as they insulate the conductor material against the post and the earth. The current flow is prevented between earth and fence and the required herding voltage is only applied in the fence material.

160 | Guide

162 | Product guide

166 | Insulators for wood and recycled plastic posts

- Tape insulators
- Rope insulators
- Polywire insulators
- Wire insulators
- Screw-in aids
- Fastening material

176 | Insulators for plastic and fibreglass posts

- Tape insulators
- Rope insulators
- Polywire insulators

178 | Insulators for steel posts

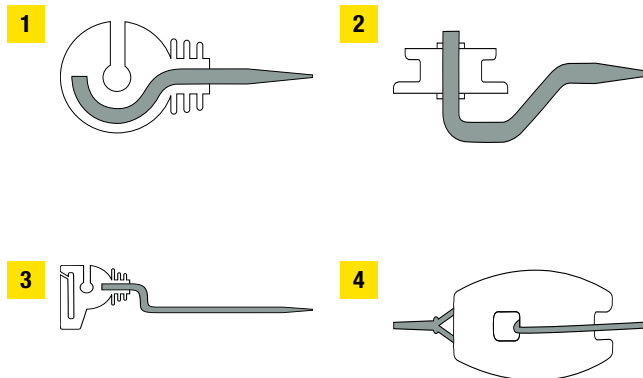
- Tape insulators
- Polywire insulators

180 | Insulators for T-posts

THINGS TO KNOW ABOUT

INSULATORS

There are countless fence variants and a suitable insulator is available for nearly every variant. To make it easier to choose the optimal accessory, some criteria should be considered when choosing an insulator.



1. IS THERE A SPECIAL FENCING SITUATION YOU NEED TO MASTER WITH YOUR INSULATOR?

1 SECTION/ GUIDE INSULATOR

Section or guide insulators always keep the conductor material at a constant height. The conductor material is guided close to the fence post which makes the fence particularly stable. In addition, their small surface area prevents animals from leaning against or touching the insulators and possibly bending them.

2 CORNER INSULATOR

If you want to build a corner in your fence, we recommend using so-called corner insulators. These can be screwed to the inside of the post. Corner insulators are particularly stable and usually have a metal support inside the insulator which absorbs the tensile forces from the conductor material. As a result, the fence is stable and will not collapse in strong gusts of wind, for example.

3 SPACER INSULATOR

Spacer insulators are less tightly fitted than section /guide insulators, as the guide of the conductor material is further away from the screw-in point of the insulator. They still guarantee good herding security. The use of these insulators prevents direct contact between the animal and the fence. This prevents the animals from leaning against fence posts, for example, and enables the fence to last longer. Spacer insulators are also used to protect solid wood fences, as the animals do not nibble at the wood.

4 STRAIN INSULATOR

Strain insulators are used at the start and end of a fence section or in corners. They are particularly suitable for use with ropes (with a diameter of up to 8 mm) or wire.



NOTE

If you want to fence in animals, attach the spacer insulators on the inside of the pasture. If you want to fend off animals, fasten the insulators on the outside of the pasture.

2. WHICH CONDUCTOR MATERIAL MUST THE INSULATOR CARRY?

Depending on the type of animal to be fenced in you have selected the appropriate conductor material for your fence. The horizontal range carries insulators for tapes, ropes, polywires and wires. There are even insulators that can carry more than one conductor material. Combined insulators are also available for special application situations; these enable you to install tape, rope or polywire in just one insulator.

Always use the appropriate insulator for your conductor material. Never attempt to install a rope in a ring insulator. Ring insulators are suitable for polywires. Otherwise you are in danger of damaging the conductor material and risk weakening the herding security of the fence system.

3. SHOULD THE CONDUCTOR MATERIAL IN THE INSULATOR RUN FREELY OR BE FIXED?

Conductor material is usually fixed in places where strong wind can occur. The conductor material can be fastened by closing the insulator or by using a screw. These variants enable the tight fit of the conductor material. Insulators with free-running conductor material are used for stable corner posts or as section/guide insulators. The advantage is that the conductor material can be stretched over long distances because it can move freely in the insulator. If fixed insulators were to be used, the conductor material would have to be readjusted on each individual insulator.



Tape runs free!



Tape is fixed!

4. HOW IS AN INSULATOR MOUNTED?

Important: Always select the appropriate insulator in relation to your post. The Product Guide will help you here:



SCREW IN

If insulators are to be fastened in wood, plastic or on stone walls, use insulators that can be screwed in, bolted, nailed or fastened with a special staple. The horizon range includes special insulators with a unique screw thread for screwing into e.g. wood posts. This special thread prevents annoying splintering of the wood post. For you, the time-consuming process of pre-drilling or countersinking is no longer necessary. Because of the low splintering of the wood – after the insulator has been attached – an extremely secure fit can be guaranteed and herding security be established in your pasture.



SCREWING / NAILING

If you prefer insulators without support, it is best to use insulators that can be nailed or fastened with special staples or screws. These are best attached to wood posts. Insulators with separate metric thread can - in addition to materials such as wood, plastic or stone - also be easily attached to drillable materials such as metal. Just as with the insulators for screwing in, a securely tight fit on the post is possible here.



CLAMPS

Depending on the type of post you use, we also carry insulators for clamping, clipping or inserting. No additional tools are necessary for installation. The insulators can be mounted directly on the post very quickly and easily.

Important icons for this chapter:

Product describing icons:

These icons describe insulator features.



Conductor material runs free



Conductor material is fixed



Section/guide insulator



Corner insulator



Length of support



Continuous support



Short support



Diameter support



UV resistant



Polycarbonates



Tape



Rope



Polywire



FE / ZN

Wire

Cross Selling Icons:

These icons refer to products that are additionally required and are compatible with the selected product.



PRODUCT GUIDE

INSULATORS

Suitable as					Conductor material				Support
Section insulator	Starting/ Corner insulator	Spacer insulator	Tension insulator	Replacement/ additional insulator	Tape (mm)	Rope (mm)	Polywire (mm)	Wire (mm)	Short
•	•				40				
	•				40				
•		•			40	8	4		•
•	•				40	8	4		•
•	•				40	8	4		•
•		•			20	8	4		•
•		•			20	8	4		
•					20		4		•
•					40				
•					40		4		
•	•				40	8	4		
	•					8	4		
•	•					8	4	2.5	•
•		•				8	4		•
•		•	•			8	4		
•							2		
•	•				13		4		•
•	•				13		4		
•					13		4		•
•		•	•		13		4		•
•							3		
•	•				13		4		
•	•				13		4		•
•		•	•		13		4		•
•	•				13		4		
•	•					7	4	2.5	
•	•						4	2.5	

FOR WOOD AND RECYCLED PLASTIC POSTS

Support	Application		Product		
	Fixed	Free running	Designation	Art. No.	Page
Continuous		•	Tape insulator corner 40	15297	167
	•		Tape insulator corner 40 plus	15299	167
		•	Tape insulator combi 40	15828C	167
		•	COMBI40GREEN	14668	167
		•	Tape insulator combi 40	15390C, 15390EI	168
		•	Tape insulator ranger® 20	15186	168
	•		Tape insulator ranger® 40 fix	14990	168
		•	Tape insulator ranger® 20	15555-25	168
	•		Tape insulator ranger® 40	14161C, 14162C	169
		•	Tape insulator ranger® 40	15460C	169
	•		Tape insulator turbomax® plus	15843C, 15837C	169
		•	Rope insulator farmer® corner plus	100121-10	170
		•	Rope insulator turbomax®	15835C	170
		•	Rope insulator turbomax® metric	15073C	170
		•	Rope insulator flexibar 400 - one side	15318	170
	•		Nail insulator farmer®	153021	171
		•	Ring insulator trapper® IS-S	14493-50	171
•		•	Ring insulator farmer® plus	15364	171
		•	Ring insulator farmer®	15275-25, 112751K-50, 15275C, 15275EI, 15275GE, 14957EI	171
		•	Ring insulator farmer®	14937	172
	•	•	Slotted insulator farmer®	15278, 15276	172
•		•	Ring insulator ranger® plus	15370, 15370-50, 15370EI, 15370EI-240, 15370HG, 15370LI	172
		•	Ring insulator ranger®	15461, 15461-50, 15461EI	173
		•	Ring insulator ranger®	15595	173
•		•	Ring insulator ranger® plus pc	15341C	173
		•	Wire insulator ranger®	15929-10, 15929EI	174
		•	Pin-lock insulator	14933-50	174

PRODUCT GUIDE
PLASTIC, FIBREGLASS AND STEEL POSTS

Suitable as					Conductor material				Support
Section insulator	Starting/ Corner insulator	Spacer insulator	Tension insulator	Replacement/ additional insulator	Tape (mm)	Rope (mm)	Polywire (mm)	Wire (mm)	Short
•				•	13	6	4		
•				•	40		4		
•				•	12		4		
•					40	8	4		
•				•		6	4		
•				•			4	2.5	
•							2		
•				•	13		4		
•				•	13	8	4		
•				•	13	8	4		

Suitable as					Conductor material				Support
Section insulator	Starting/ Corner insulator	Spacer insulator	Tension insulator	Replacement/ additional insulator	Tape (mm)	Rope (mm)	Polywire (mm)	Wire (mm)	Short
•				•			4		
•							4		
•				•			4		
•				•			4		
•				•			4		
•				•			4		

Suitable as					Conductor material				Support
Section insulator	Starting/ Corner insulator	Spacer insulator	Tension insulator	Replacement/ additional insulator	Tape (mm)	Rope (mm)	Polywire (mm)	Wire (mm)	Short
•					50	6		2.5	
•						6	6	6	
•						6	6		
•					50				
	•					6			
	•		•			6			
	•		•			6			
	•					6			
	•		•		50				



FOR PLASTIC AND FIBREGLASS POSTS

Support	Application		Product		
	Fixed	Free running	Designation	Art. No.	Page
Continuous		•	Replacement/additional insulator combi ip-15	15290, 15290EI	176
	•		Replacement/additional insulator farmer® 40	14969-25	176
		•	Replacement/additional insulator farmer® ip-19	15474C	176
		•	Replacement/additional insulator long life	15481	176
		•	Replacement/additional insulator farmer ip-15	15129	177
		•	Replacement/additional insulator clip master	14904C	177
		•	Head insulator	14922	177
		•	Replacement/additional insulator farmer® fiber	14046C	178
		•	Replacement/additional insulator long life	15480	178
		•	Replacement/additional insulator long life	17801F, 17804F	178

FOR STEEL POSTS (ROUND, OVAL AND ANGLE STEEL)

Support	Application		Product		
	Fixed	Free running	Designation	Art. No.	Page
		•	Replacement/additional insulator farmer® plastic	15054-50	179
		•	Ring insulator metr. Thread ranger® metric	14167	179
		•	Splint insulator farmer® splint	158052	179
		•	Ring insulator metr. Thread farmer® metric	15293, 152931	179
		•	Replacement/additional insulator farmer® clip	150511	180
		•	Replacement/additional insulator farmer® plastic	15053-50	180

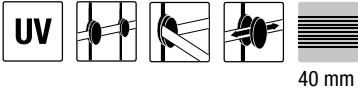
FOR T-POSTS

Support	Application		Product		
	Fixed	Free running	Designation	Art. No.	Page
		•	Top insulator	14559	181
		•	Rope insulator	14561	181
		•	Ring insulator	14567	181
		•	Wide tape insulator Eco	14563	181
	•		Starting insulator	14578	182
	•		Strain insulator (2 eyes)	14580	182
	•		Strain insulator (3 eyes)	14582	182
	•		Rope corner hook	14586	182
	•		Corner / strain insulator	14584	182



Tape insulator / corner 40

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 40 mm
Fastening: • Nailing or screwing to wood or recycled posts with at least two 5 mm screws
Advantage: • Conductor material cannot "fall" out of the insulator even when it is not under tension
Application: • Free running
Material: • Galvanized
Scope of delivery: • Screws

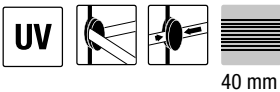


Art. No.	Unit	EAN
15297	5	4*014803*152978



Tape insulator / corner 40 plus

- Suitable as:** • Starting/corner insulator
Conductor material: • Tape up to 40 mm
Fastening: • Nailing or screwing to wood or recycled posts with at least two 5 mm screws
Advantage: • Conductor material cannot "fall" out of the insulator even when it is not under tension
 • Easy re-tensioning possible
Application: • Fixed
Scope of delivery: • Screws, bracket

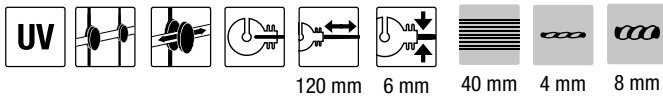


Art. No.	Material	Unit	EAN
15299	galvanized	5	4*014803*152992



Tape insulator / combi 40

- Suitable as:** • Section insulator, spacer insulator
Conductor material: • Tape up to 40 mm, polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
Application: • Free running
Support: • Short, Ø 6 mm



Art. No.	Unit	EAN
15828C	10	4*014803*158284

COMBI40GREEN

TAPE INSULATOR

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 40 mm, polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
Application: • Free running
Support: • Short, Ø 6 mm



NEW & GREEN



Art. No.	Colour	Unit	EAN
14668	green	30	4*014803*146687

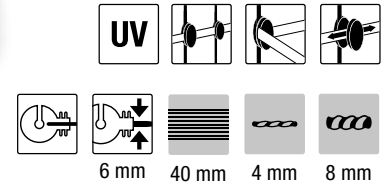


Tape insulator combi 40

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 40 mm, polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
Application: • Free running
Support: • Short, Ø 6 mm



Art. No.	Colour	Unit	EAN
15682	black	30	4 014803 156822
15390C	black	25	4 014803 153906
15390EI	black	80	4 014803 413147

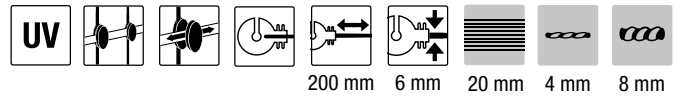


Tape insulator ranger® 20

- Suitable as:** • Section insulator, spacer insulator
Conductor material: • Tape up to 20 mm, polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Because of the lateral ground position, the tape cannot "fall" out of the insulator unintentionally, even if guided over hill and dale
Application: • Free running
Support: • Short, Ø 6 mm



Art. No.	Unit	EAN
15186	10	4 014803 151865

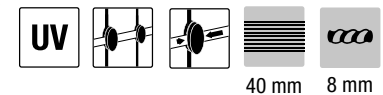


Tape insulator ranger® 40 fix

- Suitable as:** • Section insulator
Conductor material: • Tape up to 40 mm, rope up to 8 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts
Advantage: • Strongly interlocked closure support on tape, which provides a secure hold
Application: • Fixed



Art. No.	Unit	EAN
14990	25	4 014803 149909

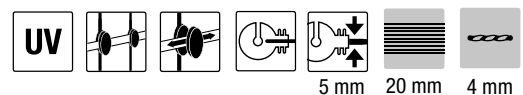


Tape insulator ranger® 20

- Suitable as:** • Section insulator
Conductor material: • Tape up to 20 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Closure support creates secure hold
Application: • Free running
Support: • Short, Ø 5 mm



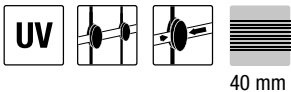
Art. No.	Unit	EAN
15555-25	25	4 014803 408365





Tape insulator ranger® 40

- Suitable as:** • Section insulator
Conductor material: • Tape up to 40 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts with two 5 mm screws
Application: • Fixed
Scope of delivery: • Plastic screws

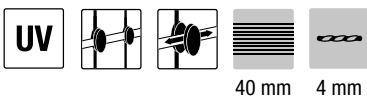


Art. No.	Design	Unit	EAN
14161C	without rubber insert	8	4 014803 141613
14162C	with rubber insert	8	4 014803 141620



Tape insulator ranger® 40

- Suitable as:** • Section insulator
Conductor material: • Tape up to 40 mm, polywire up to 4 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts with two 5 mm screws
Advantage: • Opposing clamps prevent the tape from "falling out" even in hilly terrain
Application: • Free running

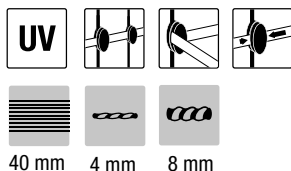


Art. No.	Unit	EAN
15460C	20	4 014803 405401



Tape insulator turbomax® plus

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 40 mm, polywires up to 4 mm, rope up to 8 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts with two 5 mm screws
Application: • Fixed



Art. No.	Design	Unit	EAN
15843C	with connecting plate can be used as gate handle insulator	1	4 014803 405470
15837C	without connecting plate	4	4 014803 405449

YOUR ADVANTAGE:

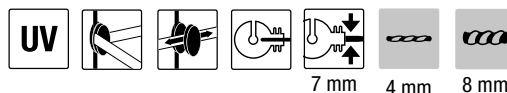
- This design is unique on the **market** and offers many advantages.
- The insulator can be opened and **closed very easily**.
- The screw is **fixed firmly** to the insulator so that it can be swivelled, making installation child's play.
- The non-rusting metal connecting plate can even be fitted with a **gate handle**.
- And **fence branches can also be easily** created.

Rope insulator farmer® corner plus

- Suitable as:** • Starting/corner insulator
Conductor material: • Polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in to wood or recycled plastic posts
Application: • Free running
Support: • Short, Ø 7 mm



Art. No.	Design	Unit	EAN
100121-10	with wide support bottom	10	4 014803 440679

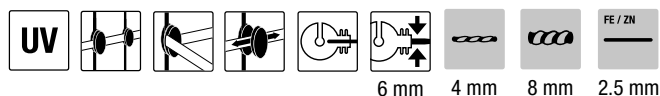


Rope insulator turbomax®

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Polywire up to 4 mm, rope up to 8 mm, wire up to 2.5 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Ergonomic shape for optimal handling
Application: • Free running
Support: • Short, Ø 6 mm

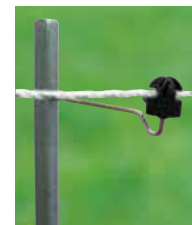


Art. No.	Unit	EAN
15835C	18	4 014803 405425

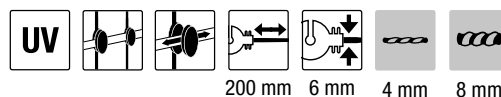


Rope insulator turbomax® metric

- Suitable as:** • Section insulator, spacer insulator
Conductor material: • Polywire up to 4 mm, rope up to 8 mm
Fastening: • Screwing in through holes of e.g. metal posts
Advantage: • Large dry room = High insulation
Application: • Free running
Support: • With metric thread M6, Ø 6 mm

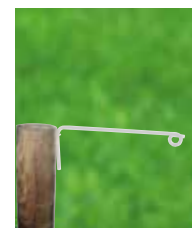


Art. No.	Unit	EAN
15073C	8	4 014803 405395

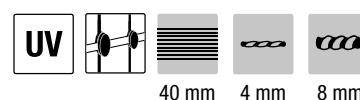


Rope insulator flexibar 400 - one side

- Suitable as:** • Section insulator, spacer insulator, strain insulator
Conductor material: • Tape up to 40 mm, polywire up to 4 mm, rope up to 8 mm
Distance: • Distance to post is 40 cm
Material: • Extruded plastic, therefore extremely durable



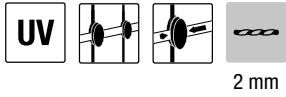
Art. No.	Unit	EAN
15318	10	4 014803 153180





NOTE

Use the knob and nail insulator only in conjunction with 9 V energisers.



2 mm

Nail insulator farmer®

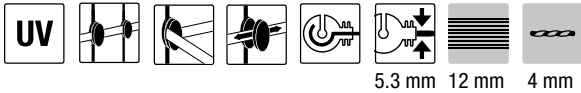
- Suitable as:** • Section insulator
- Conductor material:** • Polywire up to 2 mm
- Fastening:** • Nailing to wood or recycled plastic posts
- Advantage:** • Ideal for short fences with low voltage, as there is little insulation from the post
- Application:** • Fixed
- Scope of delivery:** • Nail

Art. No.	Unit	EAN
153021	50	4 014803 432377



Ring insulator trapper® IS-S

- Suitable as:** • Section insulator, corner insulator
- Conductor material:** • Tape up to 12 mm, polywire up to 4 mm
- Fastening:** • Screwing in to wood or recycled plastic posts
- Application:** • Free running
- Support:** • Continuous, Ø 5.3 mm



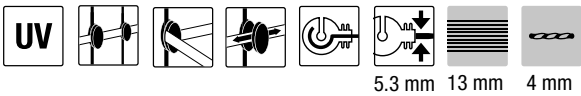
5.3 mm 12 mm 4 mm

Art. No.	Unit	EAN
14493-50	50	4 014803 144935



Ring insulator farmer® plus

- Suitable as:** • Section insulator, starting/corner insulator
- Conductor material:** • Tape up to 13 mm, polywire up to 4 mm
- Fastening:** • Screwing in to wood or recycled plastic posts
- Application:** • Free running
- Support:** • Continuous, Ø 5.3 mm



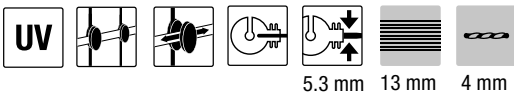
5.3 mm 13 mm 4 mm

Art. No.	Unit	EAN
15364	50	4 014803 153647



Ring insulator farmer®

- Suitable as:** • Section insulator
- Conductor material:** • Tape up to 13 mm, polywire up to 4 mm
- Fastening:** • Screwing in to wood or recycled plastic posts
- Application:** • Free running
- Support:** • Short, Ø 5.3 mm



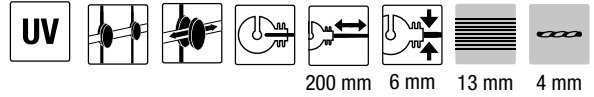
5.3 mm 13 mm 4 mm

Art. No.	Colour	Unit	EAN
15275-25	black	25	4 014803 420923
112751K-50	black	50	5 901764 261742
15275EI	black	120	4 014803 419859
15275GE	yellow	25	4 014803 417602
14957EI	SET "farmer box": 97 ring insulators 15275, 2 gate handles 15817SW, 1 screw-in aid 15357	80	4 014803 443441

Ring insulator farmer®

- Suitable as:** • Spacer insulator, strain insulator, section insulator
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Application: • Free running
Support: • Short, Ø 6 mm

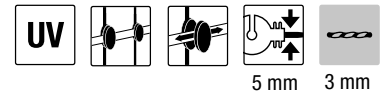
Art. No.	Unit	EAN
14937	50	4 014803 149374



Slotted insulator farmer®

- Suitable as:** • Section insulator
Conductor material: • Polywire up to 3 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Cross-reinforced dry room
Application: • Free running or fixed
Support: • Ø 5 mm

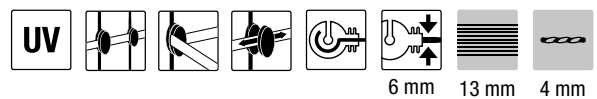
Art. No.	Colour	Unit	EAN
15278	black	50	4 014803 152787
15276	yellow	50	4 014803 152763



Ring insulator ranger® plus

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
 • Very high electric strength
Application: • Free running
Support: • Continuous, Ø 6 mm

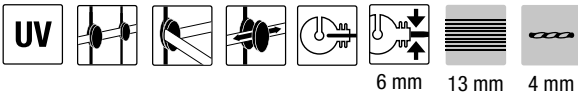
Art. No.	Colour	Unit	EAN
15370	black	25	4 014803 153708
15370-50	black	50	4 014803 405340
15370EI	black	120	4 014803 002792





Ring insulator ranger®

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
Application: • Free running
Support: • Short, Ø 6 mm

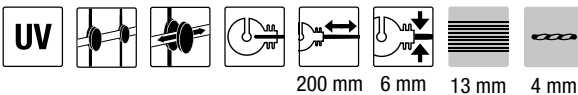


Art. No.	Unit	EAN
15461	25	4 014803 154613
15461-50	50	4 014803 405357
15461EI	120	4 014803 002785

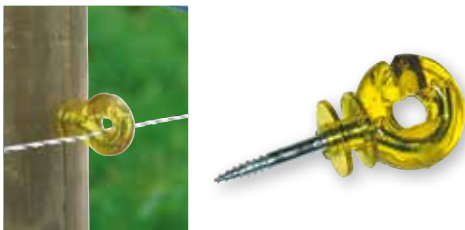


Ring insulator ranger®

- Suitable as:** • Section insulator, spacer insulator, strain insulator
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
 • Because of the lateral ground position, the tape cannot "fall" out of the insulator unintentionally, even if guided over hill and dale
Application: • Free running
Support: • Short, Ø 6 mm

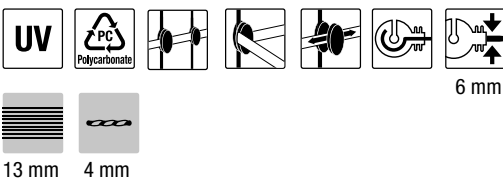


Art. No.	Unit	EAN
15595	10	4 014803 155955



Ring insulator ranger® plus pc

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Fastening: • Screwing in to wood or recycled plastic posts
Advantage: • Large dry room = High insulation
 • Extremely break-proof
Application: • Free running
Support: • Continuous, Ø 6 mm
Material: • Insulation structure of polycarbonate



Art. No.	Unit	EAN
15341C	25	4 014803 153418

Pin-lock insulator

- Suitable as:** • Section insulator
Conductor material: • Polywire up to 4 mm, rope up to 7 mm, wire up to 2.5 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts
Application: • Free running

Art. No.	Unit	EAN
14933-50	50	4 014803 440655



Wire insulator ranger®

- Suitable as:** • Section insulator, starting/corner insulator
Conductor material: • Polywire up to 4 mm, rope up to 7 mm, wire up to 2.5 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts
Application: • Free running

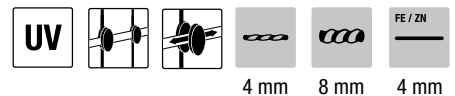
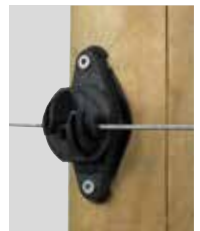
Art. No.	Unit	EAN
15929-10	10	4 014803 408389
15929EI	45	4 014803 002938



Wire insulator economy

- Suitable as:** • Section insulator
Conductor material: • For ropes up to 8 mm and for wire up to 4 mm
Fastening: • Nailing or screwing to wood or recycled plastic posts
Application: • Free running, the proven design prevents falling out even when not under tension

Art. No.	Unit	EAN
14164	25	4 014803 141644



Porcelain insulator

- Suitable for:** • Permanent fencing wire Galvador

Art. No.	Unit	EAN
15925	10	4 014803 141644





15935

15935WS

Insulating tube

Conductor material: • Wire
• Rope

Application: • Insulation of wire on wooden posts for electrified fence

Length: • 25 m
Material: • Plastic

Art. No.	Diameter	Unit	EAN
15935	interior Ø 5 mm, exterior Ø 10 mm	1	4 014803 159359
15935WS	interior Ø 5 mm, exterior Ø 10 mm	1	4 014803 425911



Special fence staples

Suitable for: • Plastic tubes (15935, 15935SW)

Application: • For fastening the plastic insulating tube to the post

Art. No.	Unit	EAN
15909	50	4 014803 159090



Screw-in aid

Suitable for: • Ring insulators with a wall thickness up to 16 mm

Application: • Easy screwing in of the insulators using a cordless screwdriver

Art. No.	Unit	EAN
15357C	1	4 014803 431738



Screw-in aid

Suitable for: • Ring insulators, rope insulator, gate handle insulators

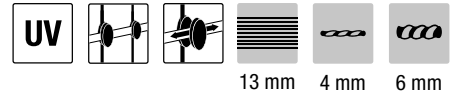
Application: • Easy screwing in of the insulators using a cordless screwdriver

Art. No.	Unit	EAN
14965C	1	4 014803 444585

Replacement/additional insulator combi ip-15

- Suitable as:** • Section insulator
Suitable for: • Posts up to Ø 15 mm
Conductor material: • Tape up to 13 mm, polywire up to 4 mm, rope up to 6 mm
Application: • Free running
Note: • Insulator is open at the post attachment

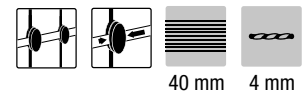
Art. No.	Unit	EAN
15290	25	4 014803 152909
15290EI	50	4 014803 417930



Replacement/additional insulator farmer® 40

- Suitable as:** • Section insulator
Suitable for: • Round posts up to Ø 12 mm
Conductor material: • Tape up to 40 mm, polywire up to 4 mm
Application: • Fixed
Note: • Insulator is closed at post output

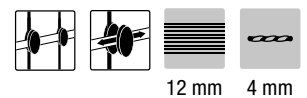
Art. No.	Unit	EAN
14969-25	25	4 014803 444592



Replacement/additional insulator farmer® ip-19

- Suitable as:** • Section insulator
Suitable for: • Posts from Ø 7-19 mm
Conductor material: • Tape up to 12 mm, polywire up to 4 mm
Application: • Free running
Note: • Insulator is open at post exit

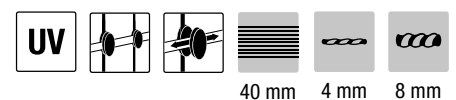
Art. No.	Unit	EAN
15474C	10	4 014803 405739



Replacement/additional insulator long life

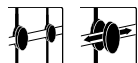
- Suitable as:** • Section insulator
Suitable for: • Plastic posts long life (15375, 15376, 15377)
Conductor material: • Tape up to 40 mm, polywire up to 4 mm, rope up to 8 mm
Application: • Free running

Art. No.	Unit	EAN
15481	25	4 014803 154811





UV

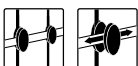


4 mm 8 mm

Replacement/additional insulator farmer® ip-15

- Suitable as:** - Section insulator
Suitable for: - Posts up to Ø 15 mm
Conductor material: - Polywire up to 4 mm, rope up to 6 mm
Application: - Free running
Note: - Insulator is closed at post output

Art. No.	Unit	EAN
15129	10	4 014803 151292
15129C	25	4 014803 420473



4 mm 2.5 mm

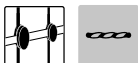
Replacement/additional insulator clip master

- Suitable as:** - Section insulator
Suitable for: - Round posts up to Ø 10 mm (14885, 14887, 14888)
Conductor material: - Polywire up to 4 mm, wire up to 2.5 mm
Application: - Free running

Art. No.	Unit	EAN
14904C	25	4 014803 149046



UV



2 mm

Head insulator

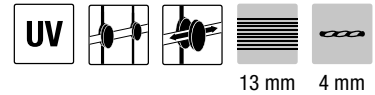
- Suitable as:** - Section insulator
Suitable for: - Fibreglass posts with Ø 12 mm (14886)
Conductor material: - Polywire up to 2 mm

Art. No.	Unit	EAN
14922	50	4 014803 149220

Replacement/additional insulator farmer® fiber

- Suitable as:** • Section insulator
Suitable for: • Posts with Ø 12 mm (14886)
Conductor material: • Tape up to 13 mm, polywire up to 4 mm
Application: • Free running

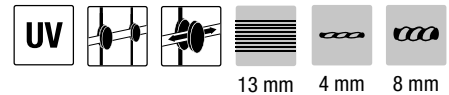
Art. No.	Unit	EAN
14046C	25	4 014803 140463



Replacement/additional insulator long life

- Suitable as:** • Section insulator
Suitable for: • Posts with Ø 19 mm (15375-15377)
Conductor material: • Tape up to 13 mm, polywire up to 4 mm, rope up to 8 mm
Application: • Free running

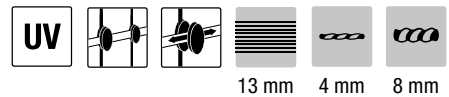
Art. No.	Unit	EAN
15480	25	4 014803 154804

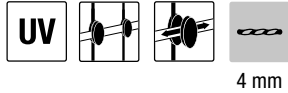


Replacement/additional insulator long life

- Suitable as:** • Section insulator
Suitable for: • 17801F: (14886)
 • 17804F: (14885, 14887, 14888)
Conductor material: • Tape up to 13 mm, polywire up to 4 mm, rope up to 8 mm
Application: • Free running

Art. No.	Diameter of post	Unit	EAN
17801F	Ø 12 mm	50	4 014803 178015
17804F	Ø 10 mm	50	4 014803 178046

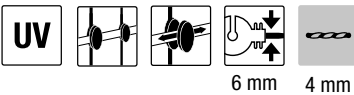
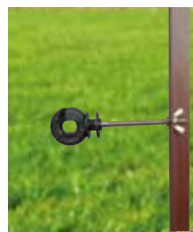




Replacement/additional insulator farmer® plastic

- Suitable as:** • Section insulator
Suitable for: • For oval steel posts (150561)
Conductor material: • Polywire up to 4 mm
Application: • Free running
Material: • Metal eye

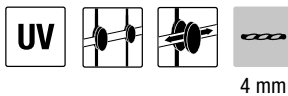
Art. No.	Unit	EAN
15054-50	50	4 014803 405319



Ring insulator metric thread ranger®

- Suitable as:** • Section insulator
Suitable for: • Angular steel posts with Ø 2-3 mm (155361, 15877, 152541)
Conductor material: • Polywire up to 4 mm
Application: • Free running
Support: • With metric thread M6, thread length of 80 mm

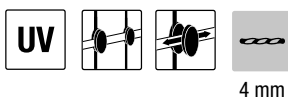
Art. No.	Unit	EAN
14167	25	4 014803 141675



Splint insulator farmer® splint

- Suitable as:** • Section insulator
Suitable for: • Angular steel posts with Ø 2-3 mm (155361, 15877, 152541)
Conductor material: • Polywire up to 4 mm
Application: • Free running

Art. No.	Unit	EAN
158052	50	4 014803 472953



Ring insulator thread farmer®

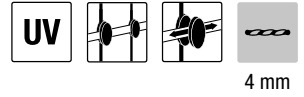
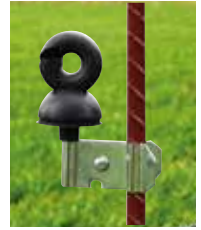
- Suitable as:** • Section insulator
Suitable for: • Angular steel posts with Ø 2-3 mm (155361, 15877, 152541)
Conductor material: • Polywire up to 4 mm
Application: • Free running
Support: • With metric thread M6, thread length of 30 mm

Art. No.	Designation	Unit	EAN
15293	Limited stock!	25	4 014803 152930
152931		25	4 014803 432346
152932		25	4 014803 152923

Replacement/additional insulator farmer® clip

- Suitable as:** • Section insulator
Suitable for: • Round and oval steel posts with Ø 8 mm (150551, 150561)
Conductor material: • Polywire up to 4 mm
Application: • Free running

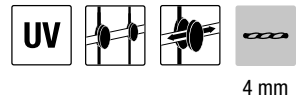
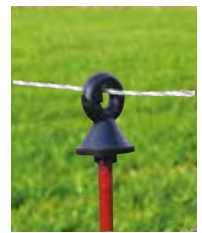
Art. No.	Unit	EAN
150511	25	4 014803 432360



Replacement/additional insulator farmer® plastic

- Suitable as:** • Section insulator
Suitable for: • Oval steel posts (150551)
Conductor material: • Polywire up to 4 mm
Application: • Free running
Material: • Plastic ring

Art. No.	Unit	EAN
15053-50	50	4 014803 405302



horizont strain insulator

- Suitable as:** • Stretching insulator
Conductor material: • Polywire, ropes and wire
Application: • Guying of the fence section
Material: • Plastic

Art. No.	Unit	EAN
15070	10	4 014803 150707

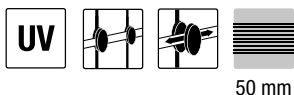




Top insulator

- Suitable as:** • Section insulator
Suitable for: • T-post ECO (14550, 14551,14552)
Conductor material: • Wide tape up to 50 mm, rope up to 6 mm, wire up to 2.5 mm
Fastening: • Slip on for quick assembly

Art. No.	Unit	EAN
14559	10	4 014803 476272



50 mm



Rope insulator

- Suitable for:** • T-post ECO (14550, 14551,14552)
Conductor material: • Rope, polywire and wire up to 6 mm
Fastening: • Clip on for quick assembly

Art. No.	Unit	EAN
14561	25	4 014803 476296



6 mm

6 mm

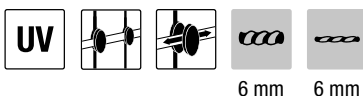
6 mm



Ring insulator

- Suitable for:** • T-post ECO (14550, 14551,14552)
Conductor material: • Rope and polywire up to 6 mm
Fastening: • Clip on for quick assembly

Art. No.	Unit	EAN
14567	25	4 014803 476357



6 mm

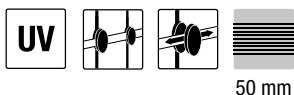
6 mm



Wide tape insulator Eco

- Suitable for:** • T-post ECO (14550, 14551,14552)
Conductor material: • Wide tape up to 50 mm
Fastening: • Clip on for quick assembly

Art. No.	Unit	EAN
14563	25	4 014803 476319

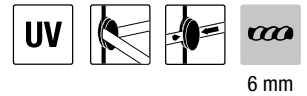


50 mm

Starting insulator



- Suitable as:** • Starting/corner insulator
Suitable for: • T-post ECO (14550, 14551, 14552)
Conductor material: • Rope up to 6 mm
Fastening: • Clip on for quick assembly

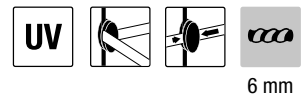
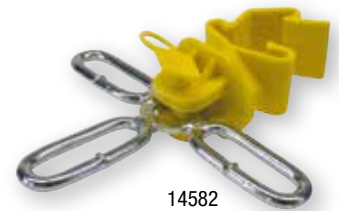
Art. No.	Unit	EAN
14578	1	 4 014803 476463



Strain insulator


- Suitable as:** • Starting/strain/corner insulator
Suitable for: • T-post ECO (14550, 14551, 14552)
Conductor material: • Rope up to 6 mm
Fastening: • Clip on for quick assembly

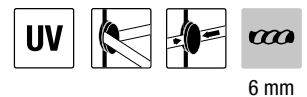
Art. No.	Unit	EAN
14580	1	 4 014803 476487
14582	1	 4 014803 476500



Rope corner hook

- Suitable as:** • Corner insulator
Suitable for: • T-post ECO (14550, 14551, 14552)
Conductor material: • Rope up to 6 mm
Fastening: • Clip on for quick assembly

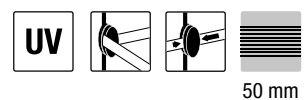
Art. No.	Unit	EAN
14586	1	 4 014803 476548



Corner / strain insulator

- Suitable as:** • Starting/strain/corner insulator
Suitable for: • T-post ECO (14550, 14551, 14552)
Conductor material: • Wide tape up to 50 mm
Fastening: • Clip on for quick assembly

Art. No.	Unit	EAN
14584	1	 4 014803 476524





09

Gates

The gate system is an important component. Gates for passage through electric fence systems are particularly necessary in agriculture. Since a gate is usually opened once or twice a day, it is subject to very high wear. If the gate is open, often no current flows. We therefore recommend an additional underground bridging in order to maintain the current flow and thus herding security.

184 | Gate handles

186 | Gate handle insulators

187 | Gate handle insulators and gate handle sets

188 | Pasture gates



Gate handle with hook trapper®

- Spring travel limit:** • 5 cm
- Material:** • Plastic
- Colour:** • Black

Art. No.	Unit	EAN
141722SW	1	4 014803 477231



Gate handle with hook farmer®

- Spring travel limit:** • 3 cm
- Material:** • Plastic
- Fastening:** • Eye for conductor material on handle

Art. No.	Colour	Unit	EAN
15817SW	black	1	4 014803 417848
15817OR	orange	1	4 014803 417879
15817GE	yellow	1	4 014803 158178
15817LI	purple	1	4 014803 441638
15817HG	bright green	1	4 014803 444660
15817TU	turquoise	1	4 014803 441614



Gate handle with eye farmer®

- Spring travel limit:** • 3 cm
- Advantage:** • Low risk of injury, as the eye, unlike the hook, cannot tear into the hand
- Material:** • Plastic
- Fastening:** • Eye for conductor material on handle
- Colour:** • Black

Art. No.	Unit	EAN
14080SW	1	4 014803 140807



Gate handle with hook ranger®

- Spring travel limit:** • None
- Advantage:** • Safe handling due to extra wide flanges
- Material:** • Plastic
- Fastening:** • Eye for conductor material on handle
- Colour:** • Black

Art. No.	Unit	EAN
15295	1	4 014803 152954

GATE HANDLE GREEN

- Spring travel limit:** • None
Advantage: • Safe handling due to extra wide flanges
Material: • Bio HDPE
Fastening: • Eye for conductor material on handle
Colour: • Green

Art. No.	Unit	EAN
14667	1	4 014803 146670

GREENLINE
made by horizon



NEW & GREEN

Gate handle with hook ranger®

- Spring travel limit:** • 5 cm
Advantage: • Reinforced insulation, therefore suitable for use with powerful equipment
 • Stainless steel rotating pressure spring
Material: • Polycarbonate
Fastening: • Eye for conductor material on handle
Colour: • Transparent dark grey

Art. No.	Unit	EAN
14350	1	4 014803 143501

**Gate handle with hook and tape connector ranger®**

- Spring travel limit:** • None
Advantage: • With the mounted tape connector, a tape up to 40 mm wide can be attached directly to the gate, thus ensuring optimum gate opening
 • The tape can be easily re-tensioned
 • Safe handling due to wide flange
Material: • Plastic
Colour: • Black

Art. No.	Unit	EAN
156031	1	4 014803 446541

**Gate handle with hook and tape connector turbomax®**

- Spring travel limit:** • 8 cm
Advantage: • With the mounted tape connector, a tape up to 40 mm wide can be attached directly to the gate, thus ensuring optimum gate opening
 • The tape can be easily re-tensioned
Material: • Plastic
Colour: • Black

Art. No.	Unit	EAN
151391GNV	1	4 014803 446558

**Gate handle with hook turbomax®**

- Spring travel limit:** • 8 cm
Advantage: • Extremely durable and compressible pressure spring
Material: • Polycarbonate
Fastening: • Eye for conductor material on handle
Colour: • Transparent yellow

Art. No.	Unit	EAN
15445E	1	4 014803 402509



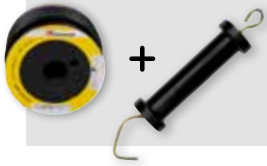


Gate handle with hook turbomax®

- Spring travel limit:** • 8 cm
- Advantage:** • Extremely durable and compressible pressure spring
- Material:** • Plastic
- Fastening:** • Eye for conductor material on handle
- Colour:** • Black

Art. No.	Unit	EAN
15139E	1	4 014803 402486

CLEVER COMBINATION: GATE HANDLE & UNDERGROUND CABLE



The current should never be transmitted through the gate handle and the conductor material in the gate. Especially when things need to move quickly, the gate handle often remains on the ground and is not immediately reattached. In this case, the current is diverted via the ground and the herding voltage in the fence drops. So, there is a risk that your animal will escape. Bridge the gate with a parallel installed underground cable.



Gate handle insulator with wooden thread

- Suitable for:** • All gate handles with hooks or eyes
- Conductor material:** • Rope, polywire, wire
- Material:** • Plastic, galvanized iron
- Application:** • For screwing in to wood and recycled plastic posts
- Colour:** • Black
- Support:** • Insulator support with thread for wood

Art. No.	Unit	EAN
14092C	2	4 014803 140920
14175	10	4 014803 141750
15126C	5	4 014803 405616



Gate handle insulator with metric thread

- Suitable for:** • All gate handles with hooks or eyes
- Conductor material:** • Rope, polywire, wire
- Material:** • Plastic, galvanized iron
- Application:** • For screwing into through holes of e.g. metal plates
- Colour:** • Black
- Support:** • Metric thread M6
- Thread length:** • 30 mm

Art. No.	Unit	EAN
14169C	5	4 014803 141699



Gate handle insulator non-twisting

- Suitable for:** • All gate handles with hooks or eyes
- Conductor material:** • Rope, polywire, wire
- Material:** • Plastic, galvanized iron
- Application:** • For screwing in to wood and recycled plastic posts
- Advantage:** • Eyes do not twist away when the gate is inserted
- Colour:** • Black
- Support:** • Insulator support with thread for wood

Art. No.	Unit	EAN
14866-10	10	4 014803 148667

Gate handle insulator with wooden thread and thimble

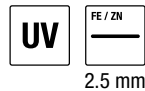
- Suitable for:** • All gate handles with hooks or eyes
- Conductor material:** • Rope, polywire, wire
- Material:** • Plastic, galvanized iron
- Application:** • For screwing in to wood and recycled plastic posts
- Advantage:** • The conductor material can be connected safely and without damage with a thimble
- Colour:** • Black
- Support:** • Insulator support with thread for wood



Art. No.	Unit	EAN
14170C	2	4 014803 141705

Gate handle insulator with metal plate

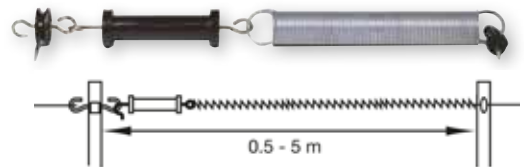
- Suitable for:** • All gate handles with hooks
- Conductor material:** • Wire up to 2.5 mm
- Application:** • For screwing or nailing on to wood and recycled plastic posts
- Advantage:** • Wire connection screws can be placed on the metal plate. This establishes a connection to other fence wires
- Colour:** • Black
- Scope of delivery:** • Metal plate
• Plastic part with screws



Art. No.	Unit	EAN
15307C	2	4 014803 405951

Gate handle set with spring

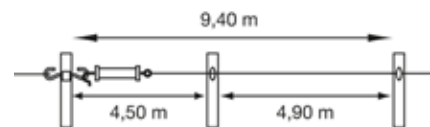
- Application:** • Especially suitable for easy opening and closing of gates through electrically conductive tension spring
- Scope of delivery:** • 1x gate handle turbomax with hook
• 1x gate handle insulator
• 1x ring insulator
• Tension spring, galvanized, thick



Art. No.	Design	Unit	EAN
15416C	Kit	1	4 014803 405708
15487	Tension spring single, galvanized, thick	1	4 014803 154873

Gate handle set with rope

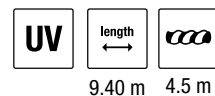
- Application:** • Especially suitable for easy opening and closing of gates without ground contact through electrically conductive rope
- Scope of delivery:** • 1x gate handle with hook
• 1x rope: 4.50 m long (slack), 9.4 long (taut)
• 1x gate handle insulator
• 1x ring insulator



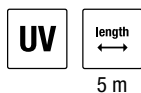
CATTLE FARMING



These gate handle sets are designed for optimal use in cattle farming.



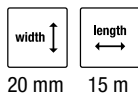
Art. No.	Unit	EAN
15316C	1	4 014803 405937



Gate handle set with thin spring

- Application:** • Especially suitable for easy opening and closing of gates through electrically conductive tension spring
- Scope of delivery:** • 1x gate handle farmer
• 1x tension spring, galvanized, thin

Art. No.	Unit	EAN
15291	1	4 014803 152916
15291C	2	4 014803 420442



NEW Roller Gate ranger®

Gate handle set 20 mm, swivelling

- Application:** • Gate for electric fences
• Easy to open without the conductor material touching the ground, the tape is rolled up automatically
• Can be swivelled when installed to the 2 sturdy metal holders and can therefore be used for 2 gates
• Large pasture gates or double-row gates up to 7 m width are possible with the 15 m long tape
- Scope of delivery:** • 1 x belt retractor, 1 x gate handle with tape connector, 2 x metal supports, 15 m tape 20 mm

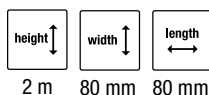
Art. No.	Unit	EAN
14651	1	4 014803 146519



Pasture gate | adjustable

- Advantage:** • Flexible pasture gate can be pulled out by 1 m in each case
- Material:** • Hot-dip galvanized
- Pipe diameter:** • 1 1/4" inside
- Pipe distance:** • 2.3 cm
- Note:** • Prices include fittings
• Delivery ex works. Please inquire freight costs

Art. No.	Length	Unit	EAN
54093	3.05 m - 4.0 m	1	4 014803 540935
54094	4.05 m - 5.0 m	1	4 014803 540942



Square tube post

- Suitable for:** • Pasture gate adjustable
- Application:** • For fastening the adjustable fittings and the bolt lock
- Design:** • With pre-drilled holes
- Note:** • Delivery ex works. Please inquire freight costs

Art. No.	Unit	EAN
54096	1	4 014803 540966



EXPERTS RECOMMEND THE USE OF HORIZONT UNDERGROUND CABLES HERE

With a gate, it is particularly important to install a parallel running underground cable. The underground cable keeps the fence electrified even when the gate is open. As a result, the energy from the fence is not discharged into the ground when the gate is open, so there is no risk to the herding security.



14040



INDEX I

A

Angular steel post 154

B

Barrier fence 112

Batteries

6 V block battery 67
9 V alkaline battery turbomax® 67
9 V zinc-carbon battery ranger® 67
12 V battery special 68
12 V battery super fleece / AGM 68

Battery box 69

Battery connecting cable 69

Battery energisers 9 V

farmer® ABN30 28
farmer ABN30 24
hotshock® ABN37 29
ranger® ABN60 30
trapper® AB12 25
trapper® B12 27
trapper® B22 27

Battery energisers 12 V

farmer® AN100 35
farmer® AN300 35
farmer® AN1000 37
farmer® AN1000Solar 37
hotshock® A300 38
hotshock® AN490 39
ranger® AN360 41
ranger® AN490 41
ranger® AN2000 43
ranger® AN3000 43
ranger® AN4800 43
trapper® AN45 33
trapper® AN80 33
trapper® AN120 33
turbomax® AN800 44

Boundary nets 112

C

Chargers 70

Charger Charge Box 3.5 - 7.0 A 70
Charger Charge Box 3.6 A 70

Conductor material

Polywire
Electric fence polywire farmer® 127
Electric fence polywire hotshock® 127
Electric fence polywire ranger® 128
Electric fence polywire trapper® 127
Electric fence polywire turbomax® 128
Electric fence polywire turbomax® braided 129

Rope

Electric fence rope farmer® 124
Electric fence rope ranger® 125
Electric fence rope turbomax® 125
Electric fence rope turbomax® braided 125

Tape

Electric fence tape farmer® 122
Electric fence tape hotshock® 123
Electric fence tape ranger® 123
Electric fence tape trapper® 122
Electric fence turbomax® 122

Wire

Electric fence wire iron 131
Electric fence wire Original Control Wire 131
Electric fence wire permanent fencing Galvadur 131
Electric fence wire stranded wire 131

Connecting cable 83

Polywire connecting cable 133
Rope connecting cable 133
Tape connecting cable 133

Connectors

Electric fence rope connector 132
Electric fence rope/polywire connector 133
Electric fence tape connection 132
Tape connector 132
Wire connector 134

Corner/gate post of softwood 156

E

Earth stakes 82

Earth stake and spiked post 82
Earth stake and spiked post with bracket 82
T-earth stake 82

Earth stakes and spiked posts for energisers

82

Electric fence connectors 132, 134

Electric fence gates

Hotgate gate for pasture fence netting 110

Electric fence polywires 127, 128

Electric fence ropes 124, 125, 129

Electric fence tapes 122, 123

Electric fence wire 131

Electric fence wire connector 134

Electric fence wire iron 131

Electric fence wire Original Control Wire 131

Electric fence wire stranded wire 131

Electric gate 188

Electric gate adjustable 188

Energiser and earth connection kit 85

F

Fence cable 83

Fence connection 85

Energiser and earth connection kit 85

Fence connection kit 84

Fence connection terminal 84, 85

Fence connection kit 84

Fence connection terminal 84, 85

Fence switch 88

Fence tester 86, 87

Fence tester farmer® 87

Fence tester Flash 2000 86

Fence tester Isotester 6000 86

Fence tester Neonlight 86

Fence tester ranger® 87

Fence tester trapper® 87

Fence tester turbomax® Fence scout 87

Fencing pliers 135

Fibreglass posts 152

Flexible gate/fence/underground cable 83

G

Gate cable, flexible 83

Gate handle insulators 186, 187

Gate handle insulator non-twisting 186

Gate handle insulator with metal plate 187

Gate handle insulator with metric thread 186

Gate handle insulator with wooden thread 186

Gate handle insulator with wooden thread and thimble 187

Gate handles 184, 185, 186

with eye farmer® 184

with hook and tape connector ranger® 185

with hook and tape connector turbomax® 185

with hook farmer® 184

with hook ranger® 184, 185

with hook trapper® 184

with hook turbomax® 185, 186

Gate handle sets 187, 188

Gate handle set with rope 187

Gate handle set with spring 187

Gate handle set with thin spring 188

H

Head insulator 176

I

Insulating tube 174

Insulators

Additional insulators

clip master 176

combi ip-15 175

farmer® 40 175

farmer® clip 179

farmer® fiber 177

farmer® ip-15 176

farmer® ip-19 175

farmer® plastic 178, 179

long life 175, 177

Corner / strain insulator 181

Head insulator 176

Nail insulators 170

Pin-lock insulator 173

Porcelain insulator 173

Ring insulators

Ring insulator 180

Ring insulator farmer® 170, 171

Ring insulator farmer® plus 170

Ring insulator metr. Thread farmer® metric 178

Ring insulator metr. Thread ranger® metric 178

Ring insulator ranger® 172

Ring insulator ranger® plus 171

Ring insulator ranger® plus pc 172

Ring insulator trapper® IS-S 170

Rope corner hook 181

Rope insulators

Rope insulator 180

Rope insulator farmer® corner plus 169

Rope insulator flexibar 400 - one side 169

Rope insulator turbomax® 169

Rope insulator turbomax® metric 169

Slotted insulator 171

Splint insulator farmer® splint 178

Starting insulator 181

Strain insulator 181

Tape insulators

Tape insulator l corner 40 166

Tape insulator l corner 40 plus 166

Tape insulator combi 40 167

Tape insulator ranger® 20 167

Tape insulator ranger® 40 168

Tape insulator ranger® 40 fix 167

Tape insulator turbomax® plus 168

Wide tape insulator Eco 180

Top insulator 180

Wire insulator economy 173

Insulators for plastic and fibreglass posts 175,

177

Insulators for steel posts 178, 179

Insulators for T-posts 180, 181

Insulators for wood and recycled plastic posts

166, 167, 168, 169, 170, 171, 172, 173

L

Lightning protection	88
Lightning protection choke	88
Lightning protection device	88
LUDA Farm solar panel	89
LUDA FenceAlarm	89

M

Mains energisers 230 V	
farmer® N200	47
hotshock® N500	48
ranger® N270	51
ranger® N420	51
scout N2	49
stallmaster	49
trapper® N45	46
turbomax® N1430	52
Monitoring	
LUDA FenceAlarm	89
LUDA solar panel for FenceAlarm / 3 W	89

N

Nail insulator	170
Netting	
Poultry	
Poultry netting with fibreglass posts 110 cm 108	
Poultry netting with plastic posts 120 cm	108
ranger® poultry netting 105 cm	95, 109
ranger® security poultry netting	95, 109
Repair kits	
Repair kit for poultry netting	113
Repair kit for turbomax® sheep netting	113
Sheep and goats	
horinetz high energy sheep and goat netting	97
horinetz sheep and goat netting	96
turbomax® Extra sheep and goat netting	98
turbomax® Plus sheep and goat netting	99
Vertical sheep and goat netting	100
Small animals	
farmer® extra I Small animal netting	111
farmer® plus I Small animal netting	111
farmer® super I Small animal netting	111
Spare parts for electric nets	113
Wolf deterrent	
horinetz super plus wolf deterrent netting	104
horinetz super wolf deterrent netting	94, 103
turbomax® braided wolf deterrent netting	107
turbomax® earth wolf deterrent netting	106
turbomax® wolf deterrent netting	105

O

On/Off switch	88
Oval steel posts	154

P

Plastic posts	144, 146, 147, 148, 150, 151, 157
Pliers	
Fencing pliers	135
Polywire connecting cable	133
Polywire connector	133
Polywire insulators	170, 171, 172, 176, 178, 179

Polywire tensioner	134
Portable box for 12 V energisers	71
Portable / vandal proof boxes	71
Post extractor	157
Post rammer	157
Posts	
Fibreglass post	152
Plastic	
Plastic post long life	148
Plastic post profi-line	144
Plastic post ranger®	146
Plastic post trapper®	144
Plastic post turbomax®	148
Plastic post turbomax® smart post	150
Recycled plastic post	156
Replacement posts	113
Robinia post / natural, rough debarked	156
Steel	
Angular steel post	154
Oval steel post with metal eye	154
Oval steel post with ring insulator	154
Steel post Pigtail	152
Stirrup post	144
T-post ECO	157
Poultry netting	109
Power supply unit 230 V	70

R

Recycled plastic post	156
Reels	
Reel I Maxi Roller 2000 & 4000	136
Reel I Mini Roller 300 PC	136
Reel I Super Roller 600	137
Reel I Turbo Roller 3 : 1	137
Reel I Turbo Roller 1500	137
Reel for wire	136
Repair kit for poultry netting	113
Repair kits for sheep netting	113
Replacement/additional insulators	175, 176, 177, 178, 179
Replacement posts	113
Ring insulator	170, 171, 172
Ring insulator with metric thread	178
Roller Gate ranger	188
Rope connecting cable	133
Rope connector	132, 133
Rope insulators	169, 176
Rope tensioner	134

S

Screw-in aids	174
Sheep and goat netting	96, 97, 100
Signal tape	106
Slotted insulators	171
Small animal netting	111
Solar bracket	76, 77
Solar bracket	76, 77
Solar bracket attachment device	77
Solar bracket with short spiked post	77
Solar bracket with spiked post	76
Solar energisers	
farmer® AS50	55
ranger® AS120	59
ranger® AS180	59
trapper® AS25	54
Solar kits	
Solar kit 2.5 watts	72
Solar kit 2 watts	72

Solar kits 5& 10 watts	72
Solar panels	
Solar panels 5 watts	73
Solar panels 10 watts	73
Solar panels 20 watts	74
Solar panels 30 watts	75
Solar panels 50 watts	75
Spare parts for electric nets	113
Special fence staples	174
Spiked posts for energisers	82
Steel post	152
Stirrup post	144
Strain insulator	179
Supply cable	83

T

Tape connecting cable	133
Tape connector	132
Tape insulators	166, 167, 168, 179
T-earth stake	82
Tensioner	
Electric fence polywire/rope tensioner	134
Electric fence rope tensioner	134
Electric fence tensioning tool I Grippile	135
Electric fence tightening tool	135
Electric fence wire tensioner accessories	135
Tensioning tool	135
Tightening tool	135
T-post	
Square tube post	188
T-post accessories	
Post rammer with handle	157
T-post extractor	157
T-post ECO	157

U

Underground cable	83
Underground cable, flexible	83

V

Vandal proof box I electrifiable	71
---	-----------

W

Warning sign, international	83
Wire connector	134
Wire tensioner	134, 135
Wolf deterrent netting	94, 103, 104