

Netting specialist

Discover our variety of nettings suitable to your needs.

Solar power

Compact, mobile & ready for immediate use - our new solar devices with powerful integrated solar panel.

Page 56

80 years horizont

Our success story: From a one-man workshop to a Europe-wide corporate group.

Page 8

Page 17

CONTENTS

ENERGISERS & ACCESSORIES

i





12

4

62

3 Intro

- 4 | Service
- 5 | Notes on the catalogue
- 6 | About us
- 9 | 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)
- 29 | Battery energisers 12 V (combi / dual)
- 45 | Mains energisers 230 V
- 53 | Solar energisers

03 Energy supply

- 64 | Guide
- 66 | Product guide
- 69 | Dry and block batteries
- 70 | 12 V batteries
- 71 | Accessories for 9 and 12 V batteries
- 72 | Chargers and power supply units
- 73 | Portable and vandal proof boxes
- 74 | Solar solutions
- 75 | Solar mounts







88



110

04 Earthing & control

- **80** | Guide
- 82 | Earth stakes
- 83 | Warning signs
- 84 | Connecting cable
- 86 | Fence tester
- 85 | Lightning protection and fence switch
- 87 | FenceAlarm2

05 Netting

- **90** | Guide
- 92 | Product guide
- 94 | Sheep and goat netting
- 99 | Wolf deterrent & Wolf deterrent netting
- 105 | Poultry netting
- 107 | Gate for electric fence netting
- 108 | Small animal netting
- 108 | Boundary nets and barrier fences
- **109** | Accessories | Replacement posts Repair set

06 Conductor material

- 112 | Guide
- 114 | Product quide
- 117 | Electric fence tape
- 120 | Electric fence rope
- 122 | Electric fence polywire
- 126 | Electric fence wire
- 128 | Electric fence connectors and tensioners
- 130 | Reels







150



170

07 Posts

- **134** | Guide
- 136 | Product guide
- 138 | Plastic posts
- 144 | Fibreglass posts
- 146 | Steel posts
- 148 | Recycling, wood posts and accessories
- 149 | T-posts and accessories

08 Insulators

- **152** | Guide
- 154 | Product guide
- 158 | Insulators for wood and recycled plastic posts
- 166 | Insulators for plastic and fibreglass posts
- 168 | Insulators for steel posts
- 169 | Insulators for T-posts

09 Gates

- 172 | Gate handles
- 174 | Gate handle insulators
- **175** | Gate handle insulators and gate handle sets

HORIZONT ENERGISERS WITH

SAFETY & SERVICE



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

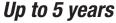
Good service is a key role at horizont. Whether in sales or in the in-house repair workshop - our experts at horizont are available to provide you with advice and practical support. In the unlikely event of a defect or damage to an energiser (e.g. due to lightning, moisture intrusion or similar), horizont's technical service is available at short notice. Many of the horizont 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 horizont 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.



warranty on horizont energisers!



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

Vision Line Do notifying benders in all the benders and traces of the control of

horizont WEIDEZAUN TIERHALTUNG

Simply enter the required 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!

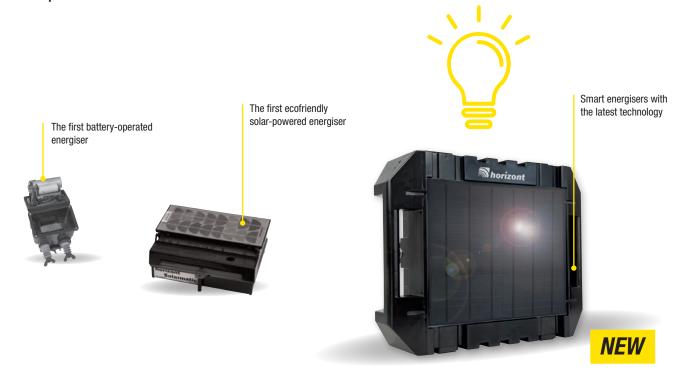
Discover our other catalogues and feel free to download them. All information is then at your fingertips.

www.animalcare.horizont.com/en

HORIZONT GROUP GMBH

A SUCCESS STORY

"The family-owned company horizont has existed for over 80 years and has developed from a one-man business into a worldwide group of companies. Social responsibility and responsible action have always been practised worldwide at horizont."



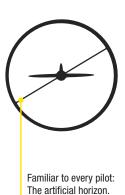
Innovations

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 80 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.



Tradition

The success story of horizont 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 horizont 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, horizont 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 horizont is a corporate group with locations in several European countries and exports premium quality products to over 50 countries worldwide. horizont 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:

horizont 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



THE FUTURE IN OUR HANDS



The first step towards sustainability and the first of many more steps in the future. At horizont, 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



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



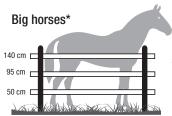
100% RECYCLABLE



FENCE AND NETTING HEIGHTS

OUR RECOMMENDATION

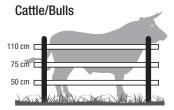
ANIMAL HUSBANDRY



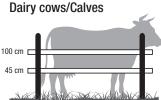
Fence height: 140 - 160 cm Conductor material: Tape Number of conductors: 3

Small horses/ponies

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



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



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

Sheep/Goats



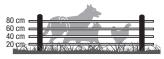
Fence height: 90 - 120 cm Conductor material: Tape, rope, polywire, wire Number of conductors: 5

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



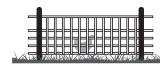
Fence height: 50 cm Conductor material: Tape, rope, polywire, wire Number of conductors: 4

Sheep/Goats



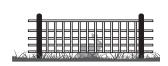
Net height: 90 - 45 cm

Poultry



Net height: 105 cm

Hares/Rabbits



Net height: 50 - 75 cm

WILDLIFE DETERRENT

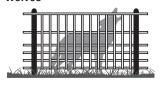
Wild boars 80 cm r 50 cm □

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

Deer 140 cm □ 105 cm ⊏ 85 cm □ 50 cm □

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

Wolves



Net height: 90 - 120 cm

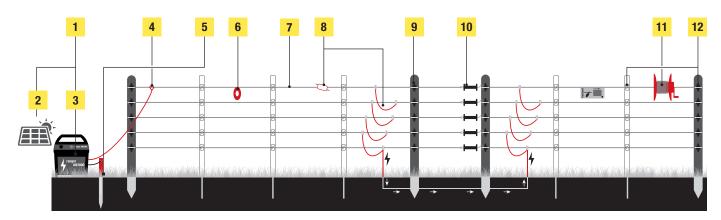
Wolves



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?
1	Energiser	The energiser transmits pulses to the fence. These pulses provide the deterrent to the animal at the electric fence.
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.
3	Energy supply	The right energy source for your energiser: 12 or 9 V batterie, mains, solar, or even a combination is possible.
4	Connection material lightning protection, switches	Makes the electrical connection from the energiser the fence. Lightning protection systems are a must for mains energisers.
5	Earthing	The energy flows from the ground through the earth stake and the connecting cable back into the energiser.
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.
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.
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.
9	Insulators	The conductor material is well insulated and held in position. The right insulator should match the conductor material.
10	Gate handles and sets	A gate is normally used several times a day and should be easy to use.
11	Reels	A mobile fence or mobile sections can be set up and dismantled quickly and easily with a reel.
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.





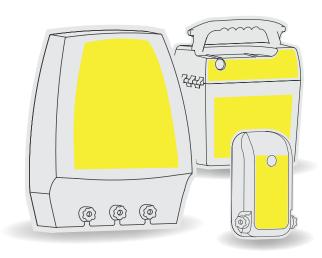
02 Energisers

The heart of an electric 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)
- 29 | Battery energisers 12 V (combi / dual)
- 45 | Mains energisers 230 V
- 51 | Special equipment
- **53** | Solar energisers

FAQ

ENERGISERS





The horizont service for you: All horizont 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
- 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
- · 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.

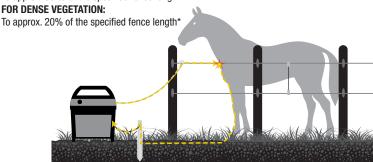
Never knot your conductor material! Too much energy is lost in the process. Always use suitable connectors to guarantee the current flow.

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:



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?

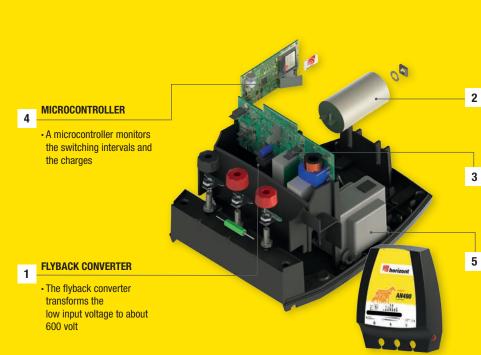
The energiser is supplied with power from the mains, a battery or a rechargeable battery (sometimes with solar support). When the energisers is earthed and connected to a fence, your circuit is not closed. If an animal now touches the fence, the electric circuit is closed by the animal: The current flows 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).



CAPACITOR

 The quantity of energy is stored in the capacitor

ELECTRONIC SWITCH

 An electronic switch regulates the intervals at which the stored energy is released

MEDIUM VOLTAGE TRANSFORMER

- The released energy flows from the capacitor into a medium voltage transformer
- The transformer transforms the 600 volts up to 15,000 volts
- This medium voltage pulse is transmitted into the fence system via the energiser connections



^{*}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



Batterv 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 as well for 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 recommendation for an energiser 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 page 18.





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











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 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

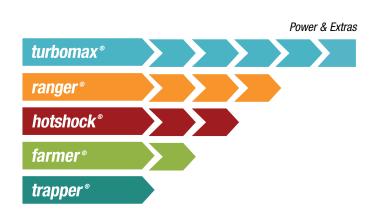
The innovative series concept

The right product series for every application:

The horizont 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® horizont 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.





IDEAL FOR CALM GRAZING ANI-MALS 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

THE MOST IMPORTANT FEATURES*:

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





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)







IDEAL FOR ROBUST ANIMALS AND FOR WILDLIFE DETERRENT

This series is perfectly suited for deterring robust animals or the keeping of longhaired 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
- · 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)





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





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)

- At-:

horizont

- · Very sturdy housing
- · turbomax technology





















horizont

PRODUCT GUIDE

ENERGISERS

BATTERY ENERGISERS 9 V

DUAL /			Without	Without Average egetation vegetation	High		Animal husbandry Wildlife deterrent								Product		
COMBI	nets per 50 m	CEE (1500V)	max.	max.						**	K	₩	THE STATE OF THE S	at	Designation	Art. No.	Page
Dual	2	9.5 km	5.5 km	3.8 km	0.9 km	•	•			•			•		ABN30 GREEN	10862	24
_	_	4 km	3 km	1 km	0.3 km	•	•		•	•					trapper® B12	10616	27
_	_	8 km	5 km	3.5 km	0.8 km	•	•		•	•					trapper® B22	10620	27
Dual	2	9.5 km	5.5 km	3.8 km	0.9 km	•	•			•			•		<i>farmer®</i> ABN30	10891	25
Dual	2	12 km	6.5 km	4.5 km	1.3 km	•	•			•			•		ranger® ABN60	10983	28

12V PB BATTERY ENERGISERS 12 V

Combi	3	8 km	4 km	2 km	0.8 km	•	•	•	•	•	•	•			trapper® AN45	10867	33
Combi	4	12 km	8 km	3.5 km	1.2 km	•	•	•	•	•	•	•			trapper® AN80	10866	33
Combi	6	18 km	12 km	4.5 km	1.5 km	•	•	•	•		•	•			trapper® AN120	10865	33
Dual	12	80 km	18 km	4.8 km	1.9 km	•	•	•	•				•		farmer® AN300	10882	35
Dual	14	180 km	45 km	20 km	10 km	•	•	•	•		•				farmer® AN500	10950	35
Dual	6	40 km	10 km	3.5 km	1.2 km	•	•	•	•				•		farmer® AN1000	10855	37
Dual	6	40 km	10 km	3.5 km	1.2 km	•	•	•	•				•		farmer® AN1000Solar	10856	37
_	14	80 km	30 km	15 km	8 km	•	•	•			•		•	•	<i>hotshock</i> ® A300	10613	38
Combi	20	235 km	70 km	15 km	8 km	•	•	•					•	•	turbomax® AN800-D	10829	31
Combi	30	320 km	100 km	25 km	13 km	•	•	•					•	•	turbomax® AN1200-D	10830	31
Combi	30	350 km	120 km	28 km	16 km	•	•	•	•		•		•	•	turbomax® AN1500-D	10843	31
Combi	14	130 km	45 km	20 km	10 km	•	•	•			•		•	•	<i>hotshock</i> ® AN490	10813	39
Dual	12	90 km	43 km	17 km	9 km	•	•	•	•		•		•	•	ranger® AN360	10997	41
Dual	14	130 km	60 km	20 km	10 km	•	•	•	•		•		•	•	ranger® AN490	10857	41
Dual	10	50 km	20 km	4.5 km	1.7 km	•	•	•			•		•		ranger® AN2000	10854	43
Dual	12	100 km	33 km	5 km	2 km	•	•	•	•				•	•	ranger® AN3000	10992	43
Dual	14	130 km	60 km	20 km	10 km	•	•	•	•				•	•	ranger® AN4800	10993	43
Dual	17	180 km	55 km	21 km	14 km	•	•	•			•		•	•	turbomax® AN800	10749	44



















MAINS ENERGISERS 230 V

DUAL (Average	High		An	imal l	husba	ndry			Wildlife	deterrent	Product					
COMBI	possible nets per 50 m	CEE (1500V)	max.	vegetation max.						Ħ	K	æ		at	Designation	Art. No.	Page		
_	3	15 km	4 km	2 km	0.8 km	•	•		•	•	•	•			<i>trapper®</i> N45	10864	48		
_	10	50 km	15 km	4 km	1.4 km	•	•		•	•			•		farmer® N200	10996	49		
_	16	120 km	45 km	20 km	10 km	•	•	•			•		•	•	<i>hotshock</i> ® N500	10614	50		
_	_	_	_	_	_										Scout N2	10407	51		
_	12	60 km	20 km	5 km	2 km	•	•		•	•			•		ranger® N270	10608	47		
_	16	100 km	40 km	10 km	4 km	•	•		•	•			•		ranger® N420	10742	47		
_	30	320 km	85 km	40 km	25 km	•	•	•		•			•		turbomax® N1430	10748	52		

SOLAR ENERGISERS

				ı									ı		1		
_	_	8.5 km	5 km	3 km	0.9 km	•	•			•					<i>trapper®</i> AS25	14982	56
_	3	11 km	6 km	4 km	1.1km	•	•			•			•		farmer® AS50	14485	57
_	8	48 km	14 km	5 km	1.5 km	•	•				•		•		farmer® AS180	10919	58
Dual	8	78 km	14 km	5 km	1.5 km	•	•	•	•	•	•	•	•	•	ranger® AS1800SC	10894	55
Dual	5	41 km	10 km	3.5 km	1.2 km	•	•	•	•	•	•	•	•	•	ranger® AS1000SC	10893	55
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
_	_	_	_	_	_										Scout AS	10895-30	51







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.



DUAL





Netting:2 x 50 mAs per CEE:9.5 kmWithout vegetation:5.5 kmAverage vegetation:3.8 kmHigh vegetation:0.9 km

Animal husbandry:



Input: • 0.4 J Max. output: • 0.3 J

Energy consumption: • 9 V: 28 - 36 mA

Dimensions (L x W x H): • 17.5 x 24.8 x 31.9 cm

Scope of delivery: • Energiser, earth stake

• Energiser, earth stake, fence and earth connecting cable , 230 V power supply

unit

Product info & features:



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 (14057) ≥ service life: 173-223 days*

• 230 V power supply unit (47PSU0010FEU)

• Earth stake 1 x 1 m (14041-1)

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
- \cdot 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





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
- · Multi-optional storage compartment for power supply unit when
- · 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

farmer® ABN30



Max. fence len	gth: N
	# W
	A A

etting: 2 x 50 m s per CEE: 9.5 km lithout vegetation: 5.8 km verage vegetation: 3.8 km igh vegetation: 0.9 km

Animal husbandry:



Input: 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 ap-

prox. 17 cm), fence and earth connecting

cable

Art. No. Unit 10891 😭 1

Product info & features:



Recommended accessories:

not

- 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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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



















trapper® **B** • Battery energiser 9 V





Integrated carrying handle

· Easy to move with one hand



Features

Very sturdy housing

Energy supply

- · 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

Possibilities of energy supply for these energisers:

- · 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

Cable busning

 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

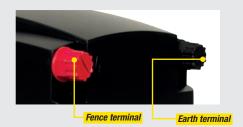
Front view

ON/OFF switch & Power Control

· Shows the activity of the energiser

Flashes in time with the pulse output

Rear view



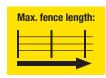


trapper B Battery energiser 9 V

trapper® B12

trapper® B22





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



Type of animal husbandry:

Input: • 0.18 J • 0.12 J Max. output: **Energy consumption:**

Max. voltage: Voltage 500 Ω:

Dimensions (L x W x H): Scope of delivery:

- 9 V: 15 mA • 12 V: 22 mA
- 8,500 V
- 1,500 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

16	⊕1	4 014803 106162

Product info & features:



Recommended accessories:

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



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



- 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
10620	⊕1	4 014803 006851



- 12 V lead-fleece battery with 12 Ah (15842) ≥ service life: 20 days* or 9 V alkaline battery with 120 Ah (15844) ≥ 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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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



9 V alkaline battery with 120 Ah



Solar panel 2 W (60140)



ranger® ABN Battery energiser 9 V





horizont

ABN60

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









Features

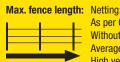
- · Plug-in profile for earthing rod in housing
- · Top and bottom part are connected by hinge
- · Exhaustive discharge cut-off at 12 V
- · Housing can be secured by padlock
- · Retaining plate inside provides firm stability for 9 and 12 V
- · Multi-optional storage compartment for power supply unit 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.



rangel





As per C Without **Average** High veg

Animal husbandry:



Input: • 0.65 J Max. output: • 0.6 J Energy consumption: 9 V: 19

• 12 V: 22 Max. voltage: · 11.000

Voltage 500 Ω: · 3,600 \ Dimensions (L x W x H): • 17.5 X Scope of delivery: Energis

prox. 1 cable

Art. No. 10983

Product info & features:

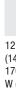


Recommended accessories:

- 12 V lea (14501 V alkali
- service • 230 V r
- · Earth s
- Solar p

Selected accessories

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









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.







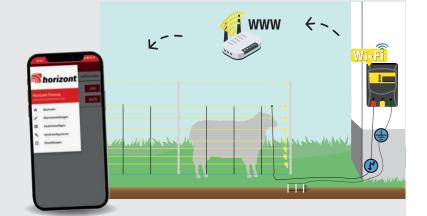


Energy supply



Special features

- Wi-Fi enabled! Can be controlled and monitored using the horizont fences app
- ECO Power: the energy-saving circuit automatically adjusts the power consumption to the condition of the fence = less energy consumption, less environmental impact and lower costs
- · Microprocessor control
- Deep discharge cut-off Effective protection of your battery



١,

horizont Fences App

With the horizont Fences app, you can easily monitor and control the turbomax AN-D electric fences. Simply download the app - there are no usage fees!









The WiFi functions at a glance:

- · Switching the electric fence on / off
- Management of multiple fence energisers
- Configurable alarm settings
- Fence status
- Battery status check
- Fence voltage control

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

COMBI

NEW

turbomax® AN800-D



NEW

turbomax® AN1200-D



NEW

turbomax® AN1500-D



Max. fence length:



Netting: As per CEE: Without vegetation: Average vegetation: High vegetation:

20 x 50 m 235 km 70 km 15 km 8 km

Netting: As per CEE: Without vegetation: Average vegetation: High vegetation:

30 x 50 m 320 km 100 km 25 km 13 km

40 x 50 m Netting: As per CEE: 350 km 120 km Without vegetation: Average vegetation: 28 km High vegetation: 16 km

Animal husbandry:



Input:

Max. Output: **Energy consumption:** Max. voltage:

Voltage 500 Ω : Dimensions (L x W x H): Scope of delivery:

• 12 J •8J

- 480 880 mA
- 8,400 V
- 4,400 V
- 25.0 x 18.5 x 14.0 cm
- · Fence energiser, fence connection cable, battery connection cable, power supply unit, warning sign



- 16 J
- •12 J
- 480 1280 mA
- 8,400 V
- 5,000 V
- 25.0 x 18.5 x 14.0 cm
- · Fence energiser, fence connection cable, battery connection cable, power supply unit, warning sign



- 23 J
- 15 J
- 480 1750 mA
- 8,400 V
- 5,400 V
- 25.0 x 18.5 x 14.0 cm
- · Fence energiser, fence connection cable, battery connection cable, power supply unit, warning sign

Product info & features:

Recommended Accessories:



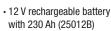


10830





10843



- ≥ operating time: 12-20 days* • Ground stake 5 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)
- 12 V rechargeable battery with 230 Ah (25012B) ≥ operating time: 12-20 days*
- Ground stake 5 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)



- · 12 V rechargeable battery with 230 Ah (25012B,)
- ≥ operating time: 12-20 days*
- Ground stake 5 x 1.5 m (15017-1)
- Solar panel 1 x 50 W (14873)





















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



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



3 x 50 m

8 km

4 km

2 km

0.8 km

trapper® AN80



4 x 50 m

12 km

8 km

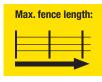
3.5 km

1.2 km

trapper® AN12	<i>:0</i>
---------------	-----------



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

Netting:

As per CEE:

Without vegetation:

Average vegetation:

High vegetation:

- 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

Art. No.	Unit	EAN
10867	⊕1	4 014803 108678



• 1.2 J

Netting:

As per CEE:

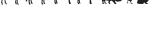
Without vegetation:

Average vegetation:

High vegetation:

- 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

10866	OTIL	4 014803 108661
Art. No.	Unit	FAN



- 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
10865	⊕1	4 014803 108654

Product info & features:



- Recommended • 12 V AGM battery with 60 Ah (14548) ≥ accessories: 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)

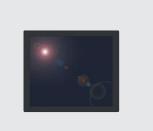
Selected accessories

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



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

12 V AGM battery with 60 Ah (14548)



Solar panel 10 W (14545)



Solar panel 20 W (14536)













Earth terminal

Extremely robust housing

- Particularly impact-resistant housing through use of high-quality plastics (PC)
- Material is UV resistant, splashproof 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



- 4-stage LED indicator for the capacity and function of the battery
- · shows the activity of the device
- Flashes in time with the pulse

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® AN300





farmer® AN500

Ma	x. fer	nce leng	th:
-			L

Animal husbandry:

Input: Max. output: **Energy consumption:** Max. voltage:

Voltage 500 Ω: Dimensions (L x W x H): Scope of delivery:

Product info & features:

Recommended accessories:

Netting: 12 x 50 m Netting: 14 x 50 m As per CEE: 80 km As per CEE: 180 km 45 km Without vegetation: 18 km Without vegetation: Average vegetation: 4.8 km Average vegetation: 20 km High vegetation: 1.9 km High vegetation: 10 km



- 3 J
- 30 265 mA
- 11,800 V • 6,200 V

• 4.2 J

- 9.0 x 19.0 x 23.3 cm
- · Energiser, power supply unit, fence and earth connecting cable

Art. No.	Unit	EAN
1088	2 😭 1	4 014803 464163

- 6,9 J
- 5 J
- 40 395mA
- 14.000 V
- 5.500 V
- 28.3 x 19.8 x 10.3 cm
- · Energiser, power supply unit, fence and earth connecting cable

Art. No.	Unit	EAN
10950	⊛1	4 014803 109507



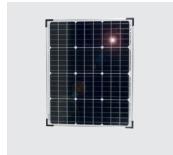
- 12 V battery special with 100 Ah (14126) ≥ service life: 16-138 days*
- 230 V power supply unit (47PSU0010EU)
- Earth stake 3 x 1 m (14041-1)
- Solar panel 1 x 30 W (14537)
- 12 V battery special with 100 Ah (14126) ≥ service life: 16-138 days*
- 230 V power supply unit (47PSU0010EU)
- Earth stake 3 x 1 m (14041-1)
- Solar panel 1 x 50 W (14873)

Selected accessories

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



12 V Lead gel battery with 75 Ah (14126)



Solar panel 20 W (14873)



Solar panel 30 W (14537)

farmer® Battery energisers 12 V



Ergonomic portable handle

· Easy to move with one hand

· Carrying comfort thanks to soft grip padding

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

AN1000 WITH THE ANT OOD WITH THE AND OOD WITH

Extremely robust housing

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

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

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.





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















DUAL

farmer® AN1000



farmer® AN1000Solar



6 x 50 m

40 km

10 km

3.5 km

1.2 km

Max. fei	nce leng	th:
		E
		

Animal husbandry:

Input: Max. output: **Energy consumption:**

Max. voltage: Voltage 500 Ω : Dimensions (L x W x H): Scope of delivery:

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





- 9 V: 40 70 mA
- 12 V: 30 90 mA
- 11,000 V
- 4,800 V
- 24.0 x 31.5 x 38.0 cm
- · Energiser, fence, earth and battery connecting cable

MAMMA	MHAHHA

• 1.4 J

Netting:

As per CEE:

Without vegetation:

Average vegetation:

High vegetation:

- 1 J
- 9 V: 40 70 mA
- 12 V: 30 90 mA
- 11,000 V
- 4,800 V
- 24.0 x 31.5 x 38.0 cm
- · 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

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont 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)



- · 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

hotshock® A300





Animal husbandry:



Input: 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. 1014903 006496 10613 😭 1

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont 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





Control bar

• Energy Control: 3-stage LED control display for capacity and function of 9 or 12 V batteries

· For large pastures

- · 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



Hanging device for wall

mounting

Ventilation slots

to allow discharge of

condensation water

Energy supply



- · Two fence terminals for operating one large and one small pasture or paddock
- · Connection socket for the power supply unit at the
- · 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

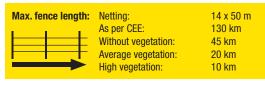
and the safety standard EN60335-2-76 and DIN EN ISO 9001

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.

COMBI

hotshock® AN490





Animal husbandry:



Input: • 4.9 J Max. output: 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	4 014803 460998

Product info & features:



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® 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, splashproof and oil-resistant





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

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

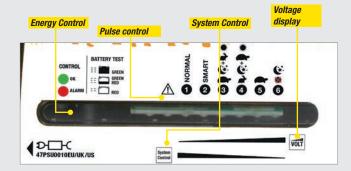


Earth terminal

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.











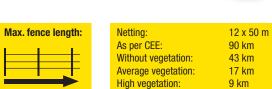




ranger® AN360



ranger® AN490



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



MARK

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

Animal husbandry:

DUAL

- 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
- 4.9 J • 70 - 450 mA • 12,000 V
- 5,200 V

• 5.7 J

- 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

Product info & features:

accessories:





Recommended

- 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

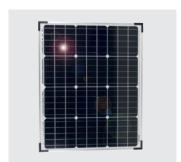
Find matching accessories for your horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



12 V battery special with 100 Ah (14126)



Solar panel 30 W (14537)



Solar panel 50 W (14873)

ranger® 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

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%)

ON/OFF switch, menu pushbutton & 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



Extremely robust housing

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

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 ar 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







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

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

Shorizont

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







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.

ranger® AN4800

















DUAL

Max. fence length:

Animal husbandry:

Input:

Max. output:

Max. voltage:

Voltage 500 Ω:

Energy consumption:

Dimensions (L x W x H):

Scope of delivery:

ranger® AN2000



A		
ı		
I		

10 x 50 m

50 km

20 km

4.5 km

1.7 km

ranger® AN3000



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



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

1	Ų,	11	ll	M	MA	
	1	100				

14 x 50 m

130 km 60 km

20 km

10 km

• 5.7 J

Netting:

As per CEE:

Without vegetation:

Average vegetation:

High vegetation:

- 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

· Energiser, fence connection cable

MMAMMY

Art. No.	Unit	EAN
10992	⊕1	4 014803 109927

Art. No.	Unit	EAN
10993	⊕1	4 014803 109934

Product info & features:



Netting:

· 2.7 J

• 65 - 215 mA

• 24.0 x 31.5 x 38.0 cm

• 12,000 V

• 4,700 V

• 2 J

As per CEE:

Without vegetation: Average vegetation:

High vegetation:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



Lead gel battery 12 V / 75 Ah (14479)



Solar panel 30 W (14539)

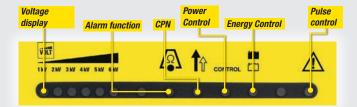


Solar panel 50 W (14873)



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
- 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.

- · 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



17 x 50 m 180 km 55 km 21 km 14 km

Max. fence length:	Netting: As per CEE:	
	Without vegetation:	
	Average vegetation:	
─	High vegetation:	

Animal husbandry:



Input: 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 connec-

ting cable

Art. No. Unit 10749 😙 1

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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





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







Energy supply



230 V №

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







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.



Mains energisers 230 V

ranger® N270

ranger® N420







Animal husbandry:

Netting: 12 x 50 m As per CEE: 60 km 20 km Without vegetation: 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





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

10608 😙 1

•	Energiser,	mains	plug,	dowels	and	
	screws					

Ar	t. No.	Unit	EAN
1	0742	⊛1	4 014803 107428

· Energiser, mains plug, dowels and

Product info & features:



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



• 6 J

• 4.2 J

• 9,300 V

• 5,600 V

screws

• 9.9 x 22.8 x 28.4 cm

• 7 W

- Earth stake 3 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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



Earth stake 1.5m (15017-1)



Lightning protection choke (15482)



Fence connection kit (15522C)



















trapper® N45



Max. fence length:

Netting: As per CEE: Without vegetation: Average vegetation: High vegetation:

3 x 50 m 15 km 4 km 2 km

0.8 km

Animal husbandry:



Input: • 0.8 J • 0.45 J Max. output: Energy consumption: • 1.5 W Max. voltage: · 8,000 V • 3,900 V Voltage 500 Ω :

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 4 014803 108647 10864 😭 1

Product info & features:



Recommended accessories:

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

Energy supply



230 V №

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

sistant



Hanging device for wall mounting

Selected accessories

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



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

farmer® W 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



Power Control

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

Energy supply



230 V №

- · 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







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



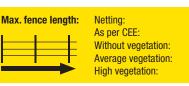
10 x 50 m

50 km

15 km

4 km

1.4 km



Animal husbandry:



Dimensions (L x W x H): • 9.9 X 22.8 X 28.4 cm

Scope of delivery: • Energiser, mains plug, dowels and

screws

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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



149





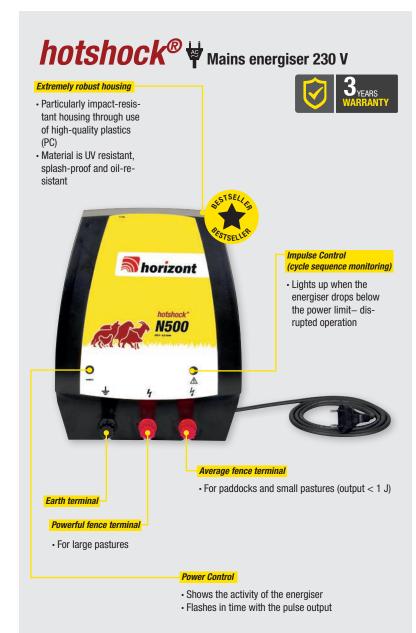












Energy supply



230 V №

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







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® N500



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

Animal husbandry:



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

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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

Scout® pigeon defence from horizont

- Special energiser, only for use as pigeon deterrent
- Particularly strong radio interference suppression for trouble-free operation of electrical equipment in buildings

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 horizont. 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 device for pigeon defence
- · Particularly strong radio interference suppression for interference-free operation of electrical devices in buildings
- $\cdot \ \text{Integrated control function} \\$
- · Two power levels: strong / weak

Input: 0.45 J, Max. Output: 0.35 J, Energy consumption: 2 W, Max. Voltage: 4,300 V, Dimensions (L x W x H): 6.7 x 23.0 x 19.1 cm Scope of delivery: Fence energiser, mains plug, screws, dowels







- · Deep discharge switch-off effective protection for your battery
- · Robust plastic solar module
- \cdot Compact unit of electric fence device and solar module
- · 4 different angles of attack and one transport position
- · Automatic switchover in solar mode

Input: 0.2 J, Max. Voltage: 6500 V, Min. power consumption at 12 V: 9 mA, Max. Power consumption at 12 V: 15 mA, Scope of delivery: Fence energiser, 30 W solar module, 12 V / 34 Ah battery, fence and earth connection cable, plug-in power supply unit

ArtNo.	EAN
10895-30	4 014803 460981



HORIZONT SPECIAL SOLUTIONS FOR YOU

Contact the competent horizont employees with your request and they will help you to realise your project professionally. horizont works together with many well-known specialists in this area who offer individual complete solutions for problem cases on site.

49 (0) 56 31 / 5 65 - 100

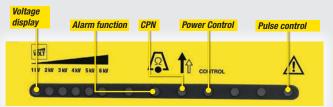


LED control display

- 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

230 V №

Features

- Straightforward and visual information display control display possible from a distance
- · 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





Animal husbandry:



Dimensions (L x W x H): \cdot 10.6 x 23.4 x 29.8 cm Scope of delivery: \cdot Energiser, mains plug

Art. No.	Unit	EAN
10748	⊕1	4 014803 107480

Product info & features:



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 horizont energiser in the comprehensive horizont range here in the catalogue or on the horizont website under the corresponding article number.



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





Solar energisers

The following horizont 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.





15 watt monocrystalline glass solar panel

 Permanently installed in the lid, for an independent and sustainable power supply



Optical monitoring

 Waterproof on/off switch with integrated LED display reliably informs you of the energisers operating status





Weatherproof and durable

- Drainage channels prevent waterlogging and ice formation
- · ideal for use in all weathers

Sturdy carrying handles

· For easy transportation

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

- Practical case system: Robust with strong fasteners, mobile and ready for immediate use - including storage space for accessories and optional power supply unit
- Integrated 15 watt monocrystalline solar module: The glass solar panel is embedded in the housing to protect it from knocks and scratches
- Complete set: Includes battery, fence and ground connection material, ground stake and warning sign - ready for immediate use, no assembly required
- Expandable power supply: Supplied with a powerful rechargeable battery and option to add a second battery for maximum reliability
- · Power saving circuit: Maximum efficiency of the battery
- Deep discharge protection: Effective protection for your battery + extended runtime
- · Set up, plug in done!

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

Practical case system

- Extremely robust housing with strong fasteners
- Space for accessories in the case

Power supply

Optimal alignment

 Earth stake with bracket for optimal solar panel tilt



Doubled battlery runtime

 Space for a second battery





















NEW ranger® AS1000SC







Max.	fence	length:
------	-------	---------



Netting: 5 x 50 m As per CEE: 41 km Without vegetation: 10 km Average vegetation: 3.5 km High vegetation: 1.2 km

8 x 50 m Netting: As per CEE: 78 km Without vegetation: 14 km Average vegetation: 5 km 1.5 km High vegetation:

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
- 22 92 mA
- 10,600 V
- 4,600 V
- 51 x 41 x 18 cm
- · portable suitcase system incl. 15 watt monocrystalline glass solar panel, energiser, 1 pc. 12V/12Ah super fleece battery (can be extended by a second battery), warning sign, fence and ground connection material, earth stake

	da	H	
4	•		

- 2.4 J
- 1.8 J
- 41 165 mA
- 10,800 V
- 5,200 V
- 51 x 41 x 18 cm
- · portable suitcase system incl. 15 watt monocrystalline glass solar panel, energiser, 1 pc. 12V/12Ah super fleece battery (can be extended by a second battery), warning sign, fence and ground connection material, earth stake

Art. No.	Unit	EAN
10893	⊕1	4 014803 461889

10894 😙 1	4 014803 461872

Product info & features:





Recommended accessories:

- Power supply (47PSU0010EU)
- Earth stake (14390)
- · 2nd battery (15842)



- Power supply (47PSU0010EU)
- · Earth stake (14390)
- 2nd battery (15842)



- · Compact unit of energiser and solar panel

Robust plastic solar panel

· Environmentally friendly use of solar

Rear view

Fence terminal

Earth terminal



Features

- · Very solid housing
- · Power Control (pulse control)

proof and oil-resistant

ON/OFF switch & Energy Control

function of 9 or 12 V batteries

· Shows the activity of the energiser

· Flashes in time with the pulse output

· 3-stage LED control display for capacity and

- · Automatic switch-over to solar operation
- · Solar charging control installed weather-protected in housing
- · Microprocessor control



Plug-in profile for earthing rod in nousina



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





Netting: 1 x 50 m As per CEE: 8.5 km Without vegetation: 5 km Average vegetation: 3 km High vegetation: 0.9 km

Animal husbandry:



Input: Max. output:

• 0.25 J Energy consumption: • 26 mA • 9,000 V

Max. voltage: 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 (7Ah), 5 W solar panel, fence and earth connecting

cable

Art. No. Unit 014803 140834 14982 😙 1

Product info & features:



Recommended accessories:

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

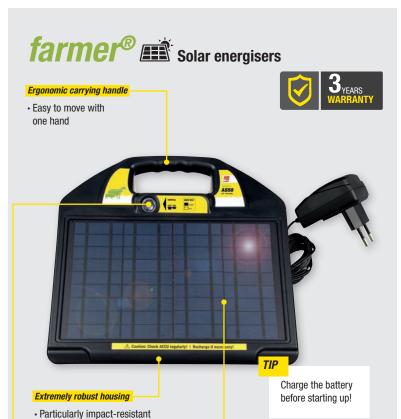
Selected accessories

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



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





Rear view

Earth terminal

ON/OFF switch & Energy Control

· 3-stage LED control display for capacity and function of 9 or 12 V batteries

housing through use of high-quality

· Material is UV resistant, splash-

proof and oil-resistant

plastics (ABS)

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

Robust plastic solar panel

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

farmer® AS50





Netting: As per CEE: Without vegetation: Average vegetation: High vegetation:

11 km 6 km 4 km 1.1 km





• 0.65 J Input: 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

(12Ah) rechargeable battery, 10 W solar panel, fence and earth connec-

ting cable

Art. No. Unit **14485** 😭 1

Product info & features:



Recommended accessories:

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

Energy supply



- · 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



Plug-in profile for earthing rod in housing



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

Fence terminal



Twist lock on the back to open the housing



Inclined front for easy alignment of solar panel to the sun

Selected accessories

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



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



















farmer® AS180





Netting: As per CEE: Without vegetation: Average vegetation: High vegetation:

8 x 50 m 48 km 14 km 5 km 1.5 km

Animal husbandry:



Input:

Max. voltage:

Voltage 500 Ω:

Scope of delivery:

Max. output: Energy consumption: • 30 - 200 mA

• 1.8 J • 10,000 V

• 2.5 J

• 4,600 V

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

Art. No. 10919 😭 1

Unit

10140024004

Product info & features:





Recommended accessories:

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

Rear view

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



Earth 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



Plug-in profile for earthing rod in housina



panel

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

Fence terminal



Twist lock on the back to open the housing



Inclined front for easy alignment of solar panel to the sun

Selected accessories

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



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





















Solar energisers

DUAL

ranger® AS120

ranger® AS180







Max. fence length:

Animal husbandry:

Input: Max. output: **Energy consumption:** Max. voltage: Voltage 500 Ω : $\textbf{Dimensions} \,\, (\textbf{L} \, \textbf{x} \, \textbf{W} \, \textbf{x} \, \textbf{H}) \text{:}$ Scope of delivery:

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



- 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

Art. No.	Unit	EAN
10986	⊕1	4 014803 109866

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



- · 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
10987	⊛1	4 014803 109873

Product info & features:



Recommended accessories:

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



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

Selected accessories

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



Earth stake (14041-1)



Fence tester farmer (14527C)



Warning sign international (14127)







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





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





Features

- · Robust plastic solar panel
- Environmentally friendly use of solar energy
- $\cdot \ \text{Compact unit of energiser and solar panel} \\$
- · 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

















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.

- 64 | Guide
- 66 | Product guide
- 69 | Dry-cell and block batteries
- 70 | 12 V batteries
- 71 | Accessories for 9 and 12 V batteries
- 72 | Chargers and power supply units
- 73 | Portable and vandal proof boxes
- 74 | Solar solutions
- 77 | 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 (socalled air-oxygen batteries) and zinc-carbon batteries on the other. Both battery versions supplied by horizont 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

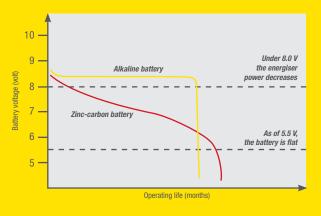
The horizont lead-fleece batteries for 12 V energisers are filled. They have low self-discharge and very good cycle resistance. Lead-fleece batteries are completely sealed, preventing any leakage of liquids. In addition, the silicic acid inside is bound in fleece. There is also no need to refill battery 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 horizont super-fleece battery; these are already included in the delivery.

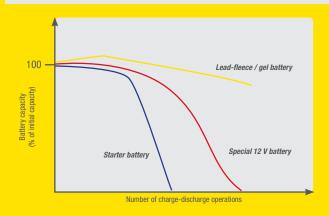
Special 12 V battery

The special 12 V batteries from horizont 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. The poles of your batteries should always be protected from the weather to ensure longevity and prevent accidental discharge. 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 horizont 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 horizont battery can be stored for up to two years without any significant loss of capacity
- Each horizont 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 horizont solar panels in combination with energisers.

All 50-watt solar panels from horizont have a practical charge regulator which automatically adjusts the voltage to prevent damage to the energiser and battery. The horizont 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

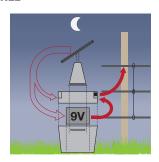
No soiling or vegetation

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 horizont can also be operated with a solar panel.

4. COMMISSIONING A SOLAR PANEL

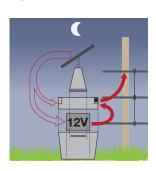




Operation of an energiser with solar panel and battery

- 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:

	Ene	rgy	Accessories	Accessories
Energiser	12 V battery	9 V battery	Solar panel	Solar bracket
trapper® AN45 10867	AGM battery 60 Ah 14548		Solar panel 10 watts 14545	stand pole solar plate 14923
trapper® AN80 10866	AGM battery 60 Ah 14548		Solar panel 10 watts 14545 / Solar panel 20 watts 14536	stand pole solar plate 14923
trapper® AN120 10865	12 V special battery 100 Ah 14126		Solar panel 20 watts 14536	stand pole solar plate 14923
trapper® B12 / B22 10616 / 10620	12 V Lead-fleece battery 12 Ah 15842	9 V alkaline battery 120 Ah 15844	Solar panel 2 watts 60140VP	
ABN30GREEN 10862	12 V Lead-fleece battery 12 Ah 15842	9 V alkaline battery 120 Ah 15844	Solar panel 2 watts 60140VP	
farmer® AN500 10950	12 V Lead-fleece battery 12 Ah 15842	9 V alkaline battery 120 Ah 15844	Solar panel 2 watts 60140VP	

	Ener	gy			Accessories
Energiser	12 V battery	9 V battery	Solar panel	Bracket	Portable / Vandal proof box
hotshock® AN490 10813			Solar panel 50 watts 14873 Solar panel 30 watts 14537	Bracket 14143	Vandal proof box 14444 / 14129 / 14906
farmer® ABN30 10891	12 V Lead-fleece battery 34 Ah 14501	9 V alkaline battery 170 Ah 12012	Solar panel 5 watts 14499		
farmer® AN300 10882	12 V special battery 100 Ah 14126		Solar panel 10 watts 14545 / Solar panel 30 watts 14537	Bracket 14143	Portable / vandal proof boxes 14444 / 14129 / 14906
farmer® AN1000 / AN1000Solar 10855 / 10856	12 V AGM battery 60 Ah 14548 12 V Lead-fleece battery 75 Ah 14479		Solar panel 10 watts 14545		
hotshock® A300 10613	12 V special battery 100 Ah 14126		Solar panel 20 watts 14536 Solar panel 30 watts 14537	Bracket 14143	Vandal proof box 14444 / 14129 / 14906
turbomax® AN800-D / AN1200-D / AN1500-D / 10892 / 10830 / 10843	12 V Lead-fleece battery 34 Ah 14501	9 V alkaline battery 170 Ah 12012	Solar panel 5 watts 14499		
ranger® AS1800SC / AS1000SC 10894 / 10893	12 V Lead-fleece battery 12 Ah 15842	9 V alkaline battery 120 Ah 15844	Solar panel 2 watts 60140VP	FURTHER	R PRODUCT RECOMMENDATION

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

Energy Accessories								
Energiser	12 V battery	9 V battery	Solar panel	Bracket	Portable / Vandal proof box			
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 12012	Solar panel 30 watts 14537					
ranger® AN2000 / AN3000 10854 / 10992	AGM battery 60 Ah 14548 12 V Lead-fleece battery 75 Ah 14479		Solar panel 20 watts with bracket 14538 Solar panel 30 watts with bracket 14537					
ranger® AN4800 10993	12 V Lead-fleece battery 75 Ah 14479		Solar panel 30 watts 14537 Solar panel 50 watts 14873					
turbomax® AN800 10749	12 V Battery 230 Ah 25012B		Solar panel 50 watts 14873	Bracket 14143	Battery box 21264			
hotshock® AN490 10813			Solar panel 50 watts 14537 Solar panel 50 watts 14873	Bracket 14143	Vandal proof box 14444 / 14129 / 14906			

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 horizont 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

Advantages: • 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
14896	turbomax® AB200	9 V / 200 Ah	12.5 cm	16.0 cm	19.0 cm	1	4 014803 148964
12012	turbomax® AB170	9 V / 170 Ah	12.5 cm	16.0 cm	19.0 cm	1	4 014803 120120
12012P	turbomax® AB170	9 V / 170 Ah	12.5 cm	16.0 cm	19.0 cm	45	4 014803 440617
14057	turbomax® AB150	9 V / 150 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 140579
15844	turbomax® AB120	9 V / 120 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 158444
15509	turbomax® AB75	9 V / 75 Ah	11.0 cm	11.5 cm	16.5 cm	1	4 014803 155092
15848	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 horizont have the best and clearest results in the conducted tests.

9 V zinc-carbon battery ranger®

Suitable for: • 9 V battery energisers

Advantages: • 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 • Included in price

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



6 V block battery

Power:
Storage:
Disposal:

• High load rating
• Up to two years
• Included in price

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

Advantages: • 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 horizont 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.

Advantages:



12 V lead-fleece battery / AGM battery

Suitable for: • Type 15842 and 12025: 9 V battery energisers

• Type 14501: Energisers farmer® ABN30 (10891)

• Energisers farmer® AN1000 (10855), ranger® AN2000

(10854), ranger® AN3000 (10992)

 Type 14479: Energisers farmer® AN1000 (10855), ranger® AN2000 (10854), ranger® AN3000 (10992), ranger® AN4800

· The horizont lead-fleece batteries have an extremely low

(10993)

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
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



Suitable for:

• 12 V special battery 230 Ah (25012B)

Advantages:

· Can be locked with sufficient storage space for the energiser

and battery

Protection against weather and theft

Art. No.

1

21264





Battery connecting cable

Suitable for:

- Connection of 12 V batteries
- Type 90501C: 9 V energisers to 12 V special 12 V batteries • Type 47WBL12: 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	4 014803 405852
47BL1-2	for trapper® AN energisers	□1	5 021385 005577
47WBL12	combi battery lead	□1	4 014803 477415
47PLAS0237	Connection terminal, single, black	□1	4 014803 016089
47PLAS0235	Connection terminal, single, red	□1	4 014803 016072



















4 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.

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



Power supply unit 230 V for energisers

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

Art. No.	Designation	Unit	EAN
47PSU0008EU	trapper® AN: 10865, 10866, 10867	1	5 021385 008530
979211	farmer® AN: 10986, 10987	1	4 014803 463784
47PSU- 0010FEU	ranger® AN: 10993, 10992, 10854 farmer® AN: 10855, 10856 farmer® ABN30: 10891	1	5 021385 008592
47PSU0010EU	ranger® AN: 10857, 10997 farmer® AN: 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 turbo-

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



















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 I 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

 $\boldsymbol{\cdot}$ 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

Material:

Suitable for: • Energisers: trapper® B12 (10616), trapper® B22 (10620), older

equiSTOP 9 V energisers

Attachment:
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 recom-

mended horizont energiser or is not needed
• 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 | 5 and 10 watts

PLASTIC FRAME

Suitable for: • Energisers: 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

 $\bullet\,12\,V$ special rechargeable batteries up to 63 Ah

Attachment: • Ground installation: with solar bracket

• Installation on portable or vandal proof box: with solar

bracket (14923)

Scope of delivery: • Connecting cable (2 m)

 $\textbf{Charge regulator:} \qquad \textbf{-} \ \text{Not required, as the charge regulator is installed in the}$

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 | 10 watts PLASTIC FRAME

Suitable for:

Energisers: trapper AN80, trapper AN12012 V batteries up to 85 Ah

Attachment:

·

Ground installation: with solar bracket
 Installation on portable or yandal proof box: y

• Installation on portable or vandal proof box: with

solar bracket (14143)

Scope of delivery Charge regulator:

Material:

· connecting cable (1.8 m), connection terminals

 Not required, as the charge regulator is installed in the recommended horizont energiser or is not needed

Solar panel: monocrystalline, plastic frame

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

Solar panel | 10 watts with bracket PLASTIC FRAME



• Energisers: farmer® AN1000

12 V batteries up to 85 Ah
Installation on the energiser

Attachment:

• Ground installation: with solar bracket

· Installation on portable or vandal proof box: with

solar bracket (14143), (14923)

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:

 \bullet Energisers: trapper® AN80 (10866), trapper® AN120 (10865),

farmer® AN300 (10882), farmer® AN1000 (10855)

• 12 V batteries from 85 to 100 Ah

Attachment: • Ground installation: with solar bracket

• Installation on portable or vandal proof box: with solar

bracket (14143), (14923)

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

LIGHT AND UNBREAKABLE

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

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

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 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 EA

14538 45.5 cm 39.0 cm 2.8 cm 1 4014803 466358

Solar panel | 30 watts PLASTIC FRAME

Suitable for: • Energisers: farmer® AN200 (10855),

farmer® AN300 (10882), ranger® AN360 (10997), ranger® AN3000 (10997), ranger®

AN2000 (10854), ranger® AN3000 (10992), ranger®

AN4800 (10993)

• 12 V batteries with 100 Ah

Attachment: • Ground installation:

• Installation on portable or vandal proof box: with solar

bracket (14143), (14923)

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 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 shatterproof. 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), ranger® AN360 (10997), ranger® AN2000 (10854), ranger® AN3000 (10992), ranger® AN4800

(10993)

• 12 V batteries with 100 Ah

Charge regulator: • Not required, as the charge regulator is installed in the

recommended horizont energiser

Material: • Solar panel: monocrystalline, plastic frame

Scope of delivery: \cdot 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: •

 $\bullet \ Solar \ panel: monocrystalline, frame: Aluminium\\$

Scope of delivery: • Complete with connecting cable, aluminium frame and

charge regulator

Art. No.	Length	Width	Height	Unit	EAN
14873	55 cm	52 cm	2.5 cm	- 1	







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.

Solar bracket with pole

Suitable for: · 5 W solar module (141451)

· 10 W solar module (14545)

· 20 W solar module (14536)

· 30 W solar module (14537)

Attachment: Attach the retaining plate to the solar module and

metal rod with step

Solar module can be easily set up next to the

electric fence with the stand pole

Material: Pole: galvanized iron

· Retaining plate: Aluminum

Length: · 62 cm

Art. No. Unit EA

14923 1 4014803 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 (14537)

Inclination: • Inclination angle adjustable from 15 to 75

degrees

Scope of delivery: • With mounting screws

Material: • Aluminium

Art. No. Unit EAN



























04Earthing & 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
- 82 | Earth cable
- 83 | Warning signs
- 83 | Connecting cable
- 85 | Fence tester
- 87 | Lightning protection and fence switch
- 87 | FenceAlarm

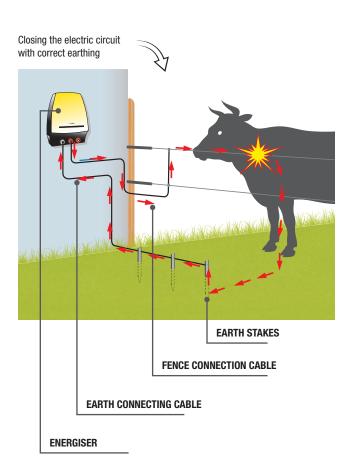
THINGS TO KNOW ABOUT

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.





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 TO GROUND 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 f.e, 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.





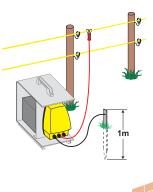


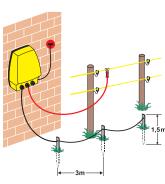


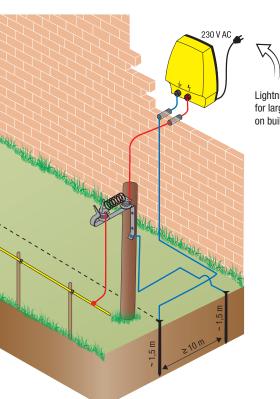












Lightning protection choke for larger systems on buildings

Important icons for this chapter:

Product describing icons:

These icons describe earthing & control features.



Height

length ←→

Width



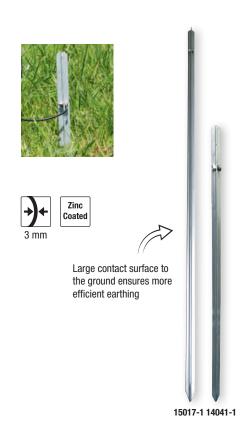
Diameter



Stainless Steel

Zinc Coated

Stainless Galvanized steel



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 4 014803 434265









Earth stake and support post with bracket

Suitable for: • horizont battery energisers built from 1981:

Currently: (10616), (10620)

Length: • 32 cm
Material: • Galvanized
Material thickness: • 2 mm

Scope of delivery: • Complete with connection bolt

Art. No.	Design	Unit	EAN
80054	Earth stake, single	ூ1	4 014803 882370



Flexible gate / fence / earth cable

Application:

• Above and underground fence supply cables, connection of earthing rods and for power supply at gates

Advantages: • Double insulated

Copper conductor
 Copper conductor
 Copper conductor
 Copper conductor

 \bullet Electric strength is at $<20,\!000\,V$

• 14523: Including eyelet 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

Earth / Connecting / Supply cable

Application: · Above and underground fence supply cables, connection of earthing

rods and for power supply at gates

Advantages: · 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



















Dimensions: • 20 x 10 cm

• Warning sign coating on both sides Scope of delivery:

Unit Art. No.

1 014803 147233 14723 1









Warning sign international

Dimensions: • 20 x 10 cm

including 10 languages

Scope of delivery: · Warning sign coating on both sides

Art. No. Unit 14127 **4**





Fence connection kit

Advantages:

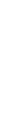
Suitable for: · Heart clamp for connection to tape up to 12 mm, rope, polywire and wire

• High voltage cable of heart clamp with reinforced plastic

sheath to avoid voltage flashovers

Material: Galvanized

Scope of delivery: · Connecting cable 120 cm, earth cable 50 cm













Zinc

Coated

Steel

150 cm







Fence connection terminal

Suitable for: \bullet Connection between energiser and fence material from tape up to

40 mm, rope, polywire and wire

· High voltage cable with reinforced plastic coating Advantages:

· Safe contact especially with higher energies

Cable length: • 120 cm

Material: Galvanized

Art. No.	Unit	EAN
10286C	ℚ1	4 014803 405500



Fence connection kit

Suitable for: · Crocodile clips for connection to tape up to 40 mm, rope,

polywire and wire

Advantages: · 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

14879C Fence connection kit **1**



Energiser and earth connection kit

• Heart clamp for connection to tape up to 12 mm, Suitable for:

rope, polywire and wire

• Earth connecting cable for fastening to earthing rod · High voltage cable with reinforced plastic coating

Advantages: Material: Galvanized

· Earthing rod, fence connection cable 2 m, earth connecting Scope of delivery:

cable 3 m, international Warning sign

Art. No. Unit **1** 15858C











Fence connection terminal

Suitable for: · Connection between energiser and fence material

from tape up to 40 mm

Advantages: · High voltage cable with reinforced plastic coating

· For safe contact especially with higher energies

Cable length: • 120 cm · Stainless steel Material:

Art. No. Unit 1 10447C

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

EAN

Operation: · Without battery

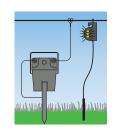
Unit

1

Art. No.

14082C



























horizont ranger® Voltmeter DUAL Digital

Advantages: • Digital display for accurate reading of the voltage

· Device switches on automatically when fence

voltage is applied

· Versatile measurement function: Measures fence voltages from 0.5 kV to 15 kV and battery voltages

from 2.5 V to 40 V

Operation: · Battery operation Scope of delivery: · Fence tester, battery

Art. No. Unit EAN 14589 1







Fence tester Neonlight

Advantages: · 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

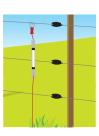
· Additional deterrent for wildlife fences

 Without battery Operation:

Scope of delivery: Fence tester

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













• 6 recessed glow lamps for easy reading of voltage Advantages:

· 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!

14494C	<u> </u>	4 014803 144942
Art. No.	Unit	EAN









Advantages: • 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

 Battery operation (2* CR2016 3V lithium battery) Operation:

• Fence tester and 2 batteries Scope of delivery:







1







· Digital display for accurate reading of the voltage Advantages:

· 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 14496C **1**







Fence tester turbomax® Fence scout

Advantages: · 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 Advantages:

· Effectively protects energiser from damage caused by

lightning and excessive voltage

Art. No. Unit 1014903 154939 1 15482

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.





DOUBLE LIGHTNING PROTECTION

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

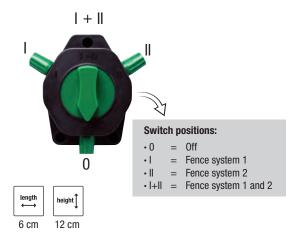
Fence switch

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 14865C 1



LUDA FenceAlarm2

Advantages: · Future-proof fence monitoring with 4G/5G technology

· Real-time alarm and precise measurement

· Remote monitoring via app

Operation: • long life battery pack / 3 FR6 lithium battery Scope of delivery: · FenceAlarm2 device, earthing rod, fence connector



After the first year of the included subscription and the trial period, you can choose between two subscription options: € 10 per month or €45 per season (one year). You can pause or cancel your subscription at any time. You can easily manage all your subscriptions and settings via the My.Luda.Farm app.























05 Netting

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

- **90** | Guide
- 92 | Product guide
- 94 | Sheep and goat netting
- 99 | Wolf deterrent netting
- 105 | Poultry netting
- 107 | Gate for electric fence netting
- 108 | Small animal netting
- 108 | Boundary nets and barrier fences
- 109 | Repair kits | Accessories

THINGS TO KNOW ABOUT





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. horizont 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 horizont 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 horizont 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

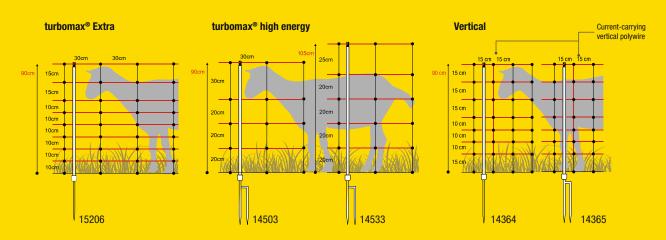
can act as a substitute and feed the pulse back to the energiser. Netting with earthing conductors can be used in all soil conditions. Particular strengths of the netting are in dry soils and earthing problems.

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.







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 horizont 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 conducting 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 of 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.

INTERCONNECTING CONDUCTIVE NETTING

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	Condu Ω /		Earth conductor	suitable for wildlife deterrent
94	15465	• horinetz	90	Double	В	1.15		
94	15471	• horinetz	105	Single	В	1.01		
94	15472	horinetz	105	Double	В	1.01		
94	14147	horinetz	120	Double	B+	0.84		
94	14543	horinetz	120	Double	В	0.84	Yes	
95	14590	horinetz high energy	90	Double	A**	0.10		
95	14592	horinetz high energy	90	Double	A**	0.10	Yes	
95	14593	norinetz high energy	105	Double	A**	0.10		
95	14594	norinetz high energy	105	Double	A**	0.10	Yes	
94	18011	norinetz livestok net	90	Single		0.2		
94	18027	norinetz livestok net	105	Double		0.29		
94	18013	horinetz livestok net	105	Single		0.29		
94	18028	horinetz livestok net	90	Double		0.29		
95	14595	horinetz high energy	120	Double	A++	0.10		
96	15206	turbomax® Extra	90	Single	A⁺	0.10		conditional
96	15219	turbomax® Extra	90	Double	A⁺	0.10		conditional
96	15207	turbomax® Extra	105	Single	A⁺	0.10		conditional
96	15221	turbomax® Extra	105	Double	A⁺	0.10		conditional
97	14364	● Vertical	90	Single	A**	0.17		excellent
97	14365	● Vertical	90	Double	A++	0.15		excellent
98	14659	farmer® with fibreglass post	90	Single	В	1.15		
98	14660	farmer® with fibreglass post	90	Double	В	1.15		
98	14714	farmer® with PVC post	90	Single	В	1.15		
98	14715	farmer® with PVC post	90	Double	В	1.15		
100	14967	horinetz super	145	Double	B+	0.75		excellent
101	14925	horinetz super plus	90 / 120	Double	В	1.15		excellent
102	14503	turbomax® high energy	90	Double	A	0.10		excellent
102	14533	turbomax® high energy	105	Double	A	0.10		excellent
103	14534	turbomax® high energy plus earth	105	Double	A	0.32	Yes	excellent
98	14893	farmer® with fibreglass post	105	Double	A	1.15		
104	14652	turbomax® high energy braided plus earth	105	Double	A	0.15	Yes	excellent
104	14647	turbomax® high energy plus earth	90	Double	A	0.15	Yes	excellent
104	14710	turbomax® high energy plus earth	120	Double		0.15		



















Y POULTRY NETTING

Page	Art.No.	Colour & Name	Netting length m	Netting height cm	Prong		uctivity / m
106	15587	■ ranger®	50	105	Single	B⁺	0.74
106	15693	nanger®	50	105	Double	B⁺	0.74
105	14653	• farmer®	25	110	Double	В	1.15
105	14654	• farmer®	50	110	Double	В	1.15
105	14655	• farmer®	25	110	Double	not ele	ctrifiable
105	14656	• farmer®	50	110	Double	not ele	ctrifiable
105	14657	• farmer®	25	120	Double	В	1.15
105	14658	• farmer®	50	120	Double	В	1.15
106	34619	nanger® security	25	105	Single	not ele	ctrifiable
106	34621	● ranger® security	25	105	Double	not ele	ctrifiable
106	34618	● ranger® security	50	105	Single	not ele	ctrifiable
106	34620	● ranger® security	50	105	Double	not ele	ctrifiable
107	14665	horizont Hotgate		120	Double		A
107	14666	horizont Hotgate		105	Double		A
107	14697	horizont Hotgate		90	Double	not ele	ctrifiable

SMALL ANIMAL NETTING

Page	Art.No.	Colour & Name	Netting length m	Netting height cm	Prong	Conductivity Ω / m	
108	15195	farmer® super	25	50	Single	В	1.01

BOUNDARY NETS & BARRIER FENCES

			Netting length	Netting height		Conductivity
Page	Art.No.	Colour & Name	m	cm	Prong	Ω/m
109	14686	Barrier fence	50	100		
109	14707	Barrier fence, incl. posts	50	100		
109	14687	Barrier fence	50	100		
109	14718	Barrier fence, incl. posts	50	100		
108	14697	Boundary net gate		90	Double	electrifiable
108	14691	Boundary net Fix	15	90	Single	
108	14692	Boundary net Fix	15	90	Single	
108	14693	Boundary net Fix	25	90	Single	
108	14694	Boundary net Flex	15	90	Single	
108	14695	Boundary net Flex	25	90	Single	

horizonts Sheep and goat netting

Suitable for: • Sheep and goats

Accessories:

· 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

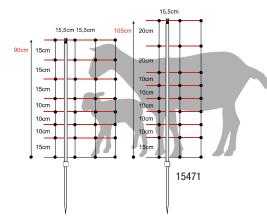
• 14 plastic posts with single or double prong

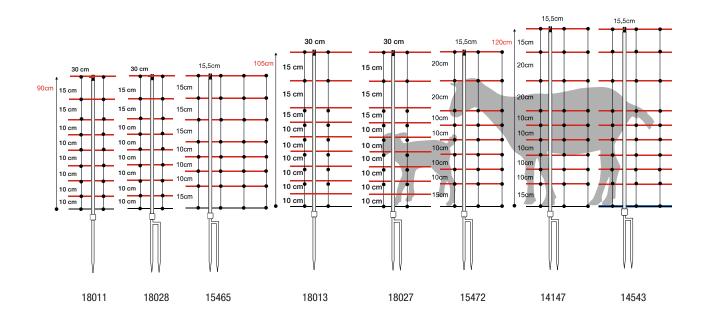
1 x repair kit, 1 x warning sign and 2 x ground stakes
 Replacement post with double prong Ø 13 mm, 90 cm high (15022-2), 105 cm high (15026-2) or 120 cm high

(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
15465	90 cm	50 m	Double prong	14 / plastic	white		8	7	$1.15\Omega/m$	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
18011	90 cm	50 m	Single prong	14 / plastic	white		9	8	$0.29~\Omega/$ m	1	4 014803 180117
18027	105 cm	50 m	Double prong	14 / plastic	white		9	8	0.29 Ω / m	1	4 014803 180278
18013	105 cm	50 m	Single prong	14 / plastic	white		9	8	0.29 Ω / m	1	4 014803 180131
18028	90 cm	50 m	Double prong	14 / plastic	white		9	8	0.29 Ω / m	1	4 014803 180285

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)







 Provides good earthing even in dry conditions





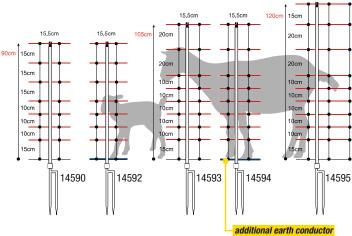












Art. No.	Netting height	Netting length	Prong	Number of posts and material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
14590	90 cm	50 m	Double prong	14 / plastic	white		8	7	0.1 Ω / m	1	4 014803 476708
14592	90 cm	50 m	Double prong	14 / plastic	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



turbomax® Extra Sheep and goat netting

Suitable for: · Sheep and goats

Wolf deterrent and wild boar repellent

Bottom mesh size: Advantages:

Scope of delivery:

Accessories:

• 10 cm high and 30 cm wide

· 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

· horizont quality with high-quality copper conductor

• 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

• Replacement post with double prong Ø 13 mm, 90 cm high

(15022-2) or 105 cm high (15026-2)

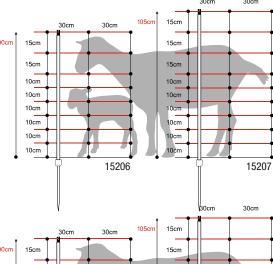




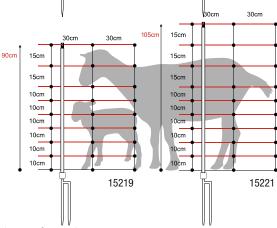


Head insulator

Foot tread with double prong



Conductivity:



Art. No.	Netting height	Netting length	Prong	Number of posts/ material	posts	netting	polywires	current-carrying polywires	Resistance	Unit	EAN
15206	90 cm	50 m	Single prong	14 / plastic	white		9	8	$0.1~\Omega/m$	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	0.1 Ω / m	1	4 014803 152077
15221	105 cm	50 m	Double prong	14 / plastic	white		10	9	0.1 Ω / m	1	4 014803 152213



15cm 15cm

14365

Vertical Sheep and goat netting

Suitable for: · Sheep and goats

· Wolf deterrent and wild boar repellent

Bottom mesh size: Advantages:

Scope of delivery:

• 15 cm high and 15 cm wide • 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

 horizont quality with high-quality copper conductors • 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)







white



14365

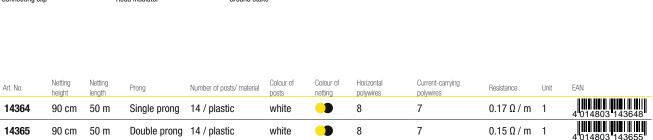
90 cm

50 m



Double prong 14 / plastic





90cm

15cm

15cm

15cm

10cm

10cm

10cm

15cm

15cm 15cm

14364





















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

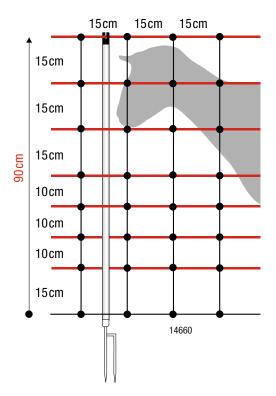
• 14 x posts with single or double prong + 2 additional, non interwoven

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
14893	105 cm	50 m	Double prong	14 + 2 / fibreglass	white		9	8	1.15	1	4 014803 148896
14715	90 cm	50 m	Double prong	14 + 2 / PVC	white	•	8	7	1.15	1	4014803 147158



RECOMMENDED BY SHEEP BREEDING ASSOCIATIONS

WOLF DEFENCE

















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. 14925

P. 103



Art. No. 14967

horinetz super Wolf defence netting





Suitable for: · Sheep and goats

· Defence against wolves and wild boars

Bottom mesh size: Advantages:

Scope of delivery:

• 15 cm high and 15 cm wide • Extra high special net for wolf defence with 145 cm height

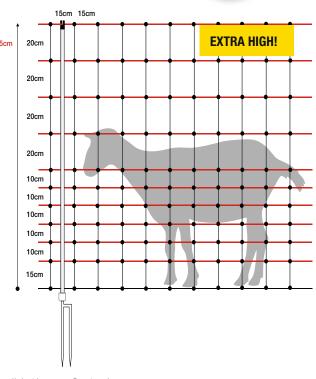
• High stability due to reinforced top and bottom polywires • 1 x herding net wolf deterrent netting horinetz super com-

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

• Replacement post with double prong Ø 19 mm, 145 cm high Accessories:



14967	145 cm	50 m	Double prong	15 / plastic	black		11	0,75	$0.75~\Omega$ / m	1	4 014803 149671
Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywire	Resistance	Unit	EAN



horinetz super plus Wolf defence netting

Suitable for: · Sheep and goats

· Defence against wolves and wild boars

Bottom mesh size: Advantages:

• 15 cm high and 15.5 cm wide

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

• Every 2nd post raised to 1.20 m for the additional

attachment of a stranded wire

Scope of delivery:

Accessories:

• 1 x herding net wolf deterrent netting horinetz super plus

complete, 50 m long

· 15 x plastic posts with single or double prong

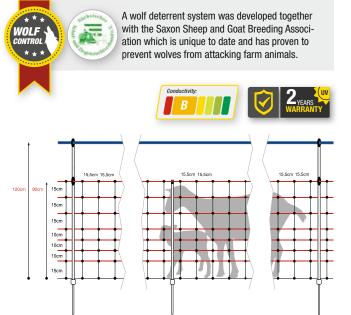
• 1 x repair kit, 1 x warning sign and 2 x ground stakes · Replacement post with double prong Ø 13 mm, 90 cm

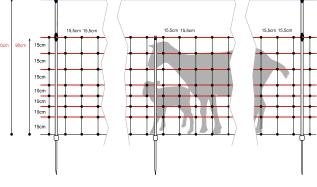
high (15022-2, 15)

· 20 mm tape (17111)

• Earth stake for guying and earthing (15017-1)

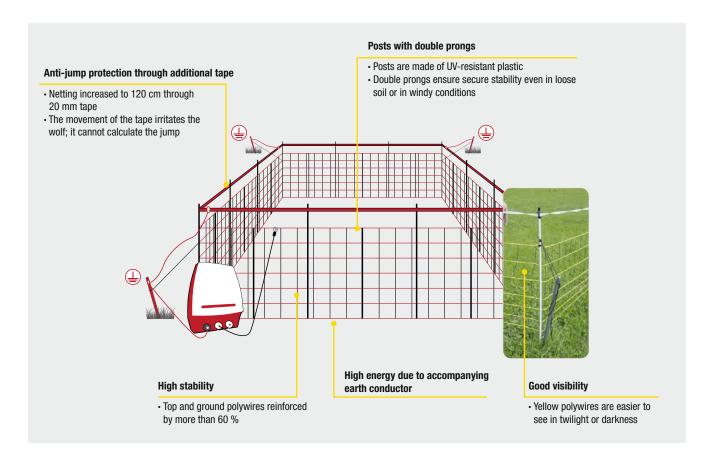
• Tape connecting cable (10447C)





-	-

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
14925	90 / 120 cm	50 m	Double pron	ng 15 / plastic	white		8	7	$1.15\;\Omega/m$	1	4 014803 149251



turbomax® high energy Wolf defence netting

Suitable for: · Sheep and goats

Defence against wolves and wild boars

Bottom mesh size: Advantages:

· 20 cm high and 30 cm wide

· 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

· horizont quality with high-grade copper conductor

Scope of delivery: • 1 x herding net turbomax high energy complete, 50 m

• 14 x plastic posts with double prongs

• 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)



Accessories:





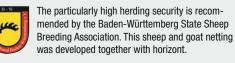
Head insulator Ground stake

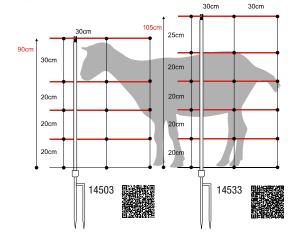












	Art. No.	Netting height	Netting length	Prong	Number of posts/ material	Colour of posts	Colour of netting	Horizontal polywires	Current-carrying polywires	Resistance	Unit	EAN
	14503	90 cm	50 m	Double prong	14 / plastic	white		5	4	$0.10~\Omega$ / m	1	4 014803 145031
-	14533	105 cm	50 m	Double prong	14 / plastic	white		6	5	0.10 Ω / m	1	4 014803 145338



turbomax® high energy plus earth Wolf defence netting

Suitable for: · Sheep and goats

· Defence against wolves and wild boars

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

· 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

· horizont quality with high-grade copper conductor

• 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)



Scope of delivery:





Double step with polywire holder



105cm



25cm

20cm

20cm

20cm

20cm

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



30cm

additional earth conductor · Provides good earthing even in dry

conditions

30cm





















NEW turbomax® high energy braided Wolf defence netting







Suitable for:

- · Sheep and goats
- Defence against wolves and wild boars

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 neces-
 - · 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

- Replacement post with double prong Ø 13 mm, 105 cm Accessories:

high (15026-2)

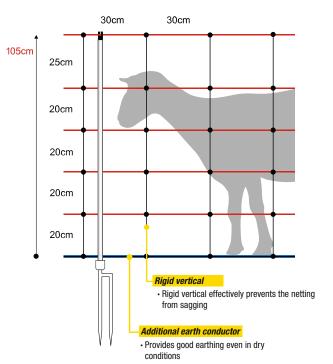




braided polywire



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
14647	90 cm	50 m	Double prong	14 / plastic	white		5	4	0.15 Ω / m	1	4 014803 146472
14652	105 cm	50 m	Double prong	14 / plastic	white		6	5	0.15 Ω / m	1	4 014803 541321
14710	120 cm	50 cm	Double prong	14 / plastic	white		7	6	0.15 Ω / m	1	4 014803 147103



farmer® poultry netting with fibreglass posts 110 cm





In many variants:

· Electrifiable and non electrifiable!

• 25 m or 50 m lengths

Suitable for: Advantages:

· For poultry and other small animals · High stability due to robust double prongs

· Fast assembly of netting

· Ideal for gardens or pastures - effective security netting

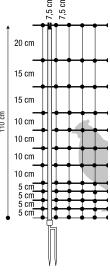
Scope of delivery:

• 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 elec	trifiable	1	4 014803 146557
14656	110 cm	50 m	Double prong	15 + 2 / fibreglass	black	•	12	not elec	ctrifiable	1	4 014803 146564

farmer® poultry netting with fibreglass posts 120 cm







· For poultry and other small animals

Advantages:

· Enormous security due to electrifiable netting

· High stability due to robust double prongs

· Fast assembly of netting

• Ideal for gardens or pastures - effective security netting

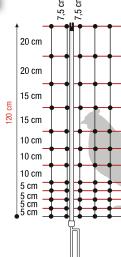
Scope of delivery:

• 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)



А	rt. 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
1	14657	120 cm	25 m	Double prong	9 + 2 / fibreglass	black	•	12	11	1.15	1	4 014803 146571
1	14658	120 cm	50 m	Double	15 +2 / fibreglass	black	•	12	11	1.15	1	4 014803 146588

















ranger® Poultry netting 105 cm







Suitable for: Bottom mesh size:

· Chickens, turkeys, geese and ducks • 5 cm high and 7.5 cm wide

Advantages:

Scope of delivery:

· High conductivity for optimal herding security

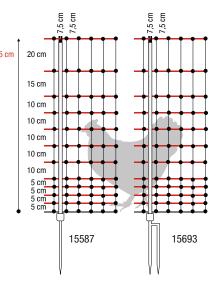
· High quality posts for high stability

· Materials are rust-free and therefore extremely resistant • 1 x poultry netting complete, 105 cm high, 50 m long

• 15 x posts with single or double prongs

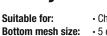
• 1 x repair kit, 1 x warning sign and 2 x ground stakes

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)



Advantages:

· Chickens, turkeys, geese and ducks • 5 cm high and 7.5 cm wide

• Tool-free connection of several nets

· High quality posts for high stability

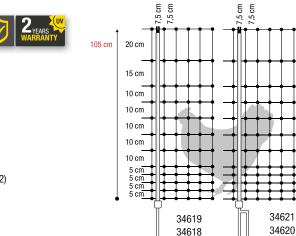
· Without current-carrying conductors, no electrification possible

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 ele	ctrifiable	1	4 014803 346193
34621	105 cm	25 m	Double prong	9 / plastic	green		12	not ele	ctrifiable	1	4 014803 346216
34618	105 cm	50 m	Single prong	15 / plastic	green		12	not ele	ctrifiable	1	4 014803 346186
34620	105 cm	50 m	Double prong	15 / plastic	green	•	12	not ele	ctrifiable	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

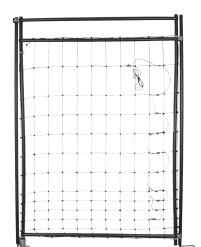
• PVC posts with double prong Material:

Colour: • Black

Scope of delivery: · Connection accessories





























14665 14666

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 I small animal netting

Suitable for:

· Hares and rabbits

Bottom mesh size: Advantages:

• 5 cm high and 7.5 cm wide · High quality posts for high stability

· horizont quality with high-quality stainless steel

conductors

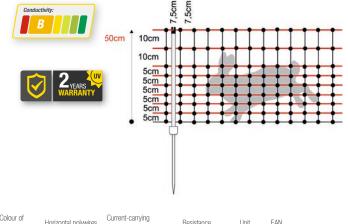
Scope of delivery:

• 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:



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

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

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



Boundary net Fix:



Boundary net Flex:



Barrier fences

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:

Art. No.

14686

14707

14687

14718

- 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

Barrier fence green

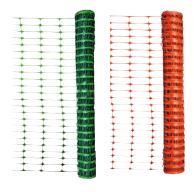
Barrier fence orange

Barrier fence green, incl. posts

Barrier fence orange, incl. posts

· Posts also available separately: 14706

Designation



4 04 4000 4 40000





















Replacement posts

Art. No.	Material	Prong	Post height above ground	Colour	Diameter	Unit	EAN		
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		
14661	Fibreglass	Double prong	120 cm	black	13 mm	5	4 014803 146618	បា	
14662	Fibreglass	Double prong	110 cm	black	13 mm	5	4 014803 146625	μI	
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		П
14696	Fibreglass	Single prong	90 cm	black	10 x 8 mm	5	4 014803 147691		11
14706	Metal	Single prong	100 cm	red	12 mm	10	4 014803 147066		

Height Unit

1 m 1

1 m 1

1 m

1 m

Colour

Length

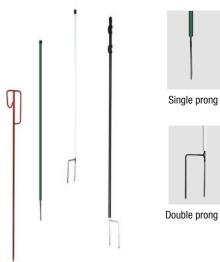
50 m

50 m

50 m

50 m

EAN



Spare parts for electric nets

Art. No.	Designation	Unit	EAN
15030-5	Stake	1	4 014803 425102
15030-23	Brass metal clip	1	4 014803 428271









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.

- **112** | Guide
- 114 | Product guide
- **117** | Electric fence tape
- **120** | Electric fence rope
- **122** | Electric fence polywire
- 126 | Electric fence wire
- **128** | Electric fence connectors and tensioners
- 130 | 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 $\mbox{\bf RESISTANCE}$ 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)

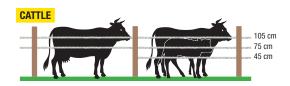
- · If the lowest level of the conductor material is covered with vegetation, the energy loss from the fence increases due to current leakage
- · Ideally, the levels in the fence are free of vegetation, which has a positive effect on the maximum fence length
- · For outdoor fencing, the use of conductor 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, horizont recommends different conductor materials and a certain number of levels* when building fences:



horizont 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!



horizont 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.



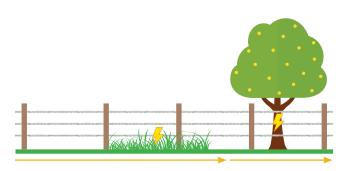
horizont recommends fencing in poultry with electric nets.

WILDLIFE OR WOLF DETERRENT



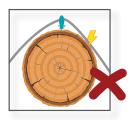


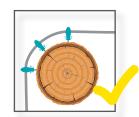
horizont recommends securing corn fields or forest areas against wild boars with electric fence tape or rope. For wolf deterrent and for the protection of sheep or goats, horizont recommends the use of special wolf deterrent netting.



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 horizont.





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 horizont conductor material to make it even more conductive. The different resistance values are decisive here:



THE CONDUCTIVITY:

The required herding pulse energy can be achieved through high electrical conductivity. Each horizont 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.



Tape

Polypropylene



Rope

Zinc

Coated

Galvanized



Aluminium



length

Length





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	f anima	al			Fence length*	Width	Breaking load	Colour	Pro	duct	
M			***	d	Æ	M	THE	т	mm	~ kg		Designation	Art. No.	Page
	•	•	•	•	•		•	210	10	40	white	farmer® T10 - W	17451	118
	•	•	•	•	•		•	210	10	40	yellow/orange	farmer® T10 - 0	17287	118
	•	•	•	•	•		•	280	20	90	white	farmer® T20 - W	17475	118
	•	•	•	•	•		•	280	20	90	white	farmer® T20 - W	17272	118
	•	•	•	•	•		•	280	20	90	yellow/orange	farmer® T20 - 0	17528	118
•	•	•	•	•	•		•	560	40	120	white	farmer® T40 - W	17458	118
	•		•	•			•	5,600	12	100	white/blue	hotshock® T12 - W	17211	119
	•	•	•	•			•	9,100	12	60	yellow/blue/green	ranger® FLU0 T12	17116	119
	•	•	•	•			•	9,100	12	60	white/yellow	ranger® T12 - W	17113	119
	•	•	•	•			•	11,100	20	120	white/yellow	ranger® T20 - W	17114	119
•	•	•	•	•			•	15,000	40	180	white/yellow	ranger® T40 - W	17115	119
	•	•	•	•			•	21,400	12	60	white/black	turbomax® T12	17110	118
	•	•	•	•			•	20,000	20	140	white/black	turbomax® T20	17111	118
•	•	•	•	•			•	33,300	40	240	white/black	turbomax® T40	17112	118
•				•				200	20	80	white	horizont reflect T20-w	17114RFL	119
•				•				200	20	80	blue	horizont reflect T20-B	17114BRFL	119



















ELECTRIC FENCE ROPES

Fence length*				Type of	anima	n/			Ø	Breaking load	Colour	Pro	duct	
т	M	1		***	at	煮	¥	rit	mm	~ kg		Designation	Art. No.	Page
740		•	•	•	•	•			6	250	white	farmer® R6	153372	120
740		•	•	•	•	•			6	250	white	farmer® R6	153372-400	120
370		•	•	•	•	•			8	100	white/black	farmer® stretch W3	462560	120
13,700		•	•	•	•	•			6	250	white/yellow	ranger® R6	17182	121
13,700		•	•	•	•	•			6	250	white/yellow	ranger® R6	17182-400	121
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180	121
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180-400	121
17,700		•		•	•			•	6	500	white/black	turbomax® R6-PE	17180-800	121
33,300		•	•	•	•	•		•	5.5	600	white/black	turbomax® braided rope D5.5	145131-400	121

ELECTRIC FENCE WIRES

Fence length*				Type of	f anima	al .			Ø	Breaking load	Material	Pro	duct	
т	M	1	*	***	at	Æ	¥	RTT.	mm	~ kg		Designation	Art. No.	Page
8,300		•	•	•	•				1.5	30	Iron	Dederon polywire	15833S	127
60,000	• •			•	•	•		1.8	500	galvanized	Steel wire	15036	127	
25,000		•	•	•	•	•	•		1.5	200	galvanized	Stranded wire	15009	127
25,000		•	•	•					1.5	200	galvanized	Stranded wire	14134-400	127
75,000		•	•	•	•		•	•	2.5	500	galvanized	GALVADUR	15945	127

PRODUCT GUIDE FOR ELECTRIC FENCE POLYWIRES



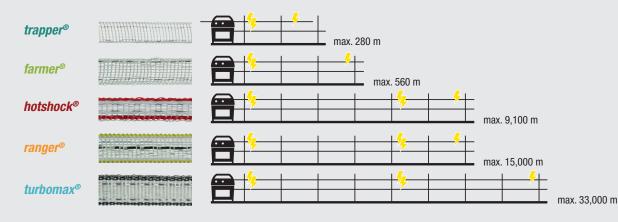
excellently suited for conditionally suited for

ELECTRIC FENCE POLYWIRES

Fence length*								Breaking load	Colour	Pro	oduct		
т	M	ATT.		100	at	Æ	¥	TH	~ kg		Designation	Art. No.	Page
210		•				•	•		30	yellow/orange	trapper® W3	15567	123
900		•	•		•	•	•	•	70	white	farmer® W9 - W	15277	123
600		•	•		•	•	•	•	60	white	farmer® W6 - W	15283	123
300		•	•		•	•	•	•	50	yellow/orange	farmer® W3 - 0	15345	123
12,700		•	•	•	•		•	•	120	white/blue	hotshock® W9 - B	17149-400	123
250		•		•					70	white	farmer® W9- W	15347	123
8,600		•	•	•	•		•		160	orange/grey	ranger® W3 - 0	17143	124
8,600		•	•	•	•		•		160	orange/grey	ranger® W3 - 0	17143-400	124
8,600		•	•	•	•		•		160	orange/grey	ranger® W3 - 0	17143-1000	124
8,600		•	•	•	•		•		160	white/yellow	ranger® W3 - W	17144-400	124
8,600		•	•	•	•		•		160	white/yellow	ranger® W3 - W	17144-1000	124
25,000		•	•	•	•		•		180	white/black	turbomax® W6	17140	124
25,000		•	•	•	•		•		180	white/black	turbomax® W6	17140-400	124
25,000		•	•	•	•		•		180	white/black	turbomax® W6	17140-1000	124
27,300		•	•	•	•		•		200	white/black	turbomax® W9	17141	124
27,300		•	•	•	•		•		200	white/black	turbomax® W9	17141-400	124
27,300		•	•	•	•		•		200	white/black	turbomax® W9	17141-1000	124
37,500		•	•	•	•		•		200	white/black	turbomax® W12	17142	124
37,500		•	•	•	•		•		200	white/black	turbomax® W12	17142-400	124
37,500		•	•	•	•		•		200	white/black	turbomax® W12	17142-1000	124
23,100		•	•	•	•		•		200	white/black	turbomax® braided rope D3	145121	125
23,100		•	•	•	•		•		200	white/black	turbomax® braided rope D3	145121-400	125

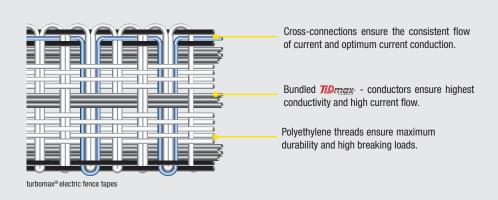


horizont electric fence tapes are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence tape for every individual application. When choosing the conductor material, pay attention to width and colour for optimum herding security.



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

specified fence lengths. If using several fence conductors on several levels, longer fences are possible.















Electric fence tape farmer®

Suitable for: · Short fences and strip grazing Advantages:

· 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	\circ	1	4 014803 174512
17287	farmer® T10 - 0	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	0	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	0	1	4 014803 172723
17528	farmer® T20 - 0	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	0	1	4 014803 174581



Electric fence tape turbomax®

Suitable for: · Long to very long fences

Advantages:

 High conductivity ensures high herding security
 Conductors of Themes 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	Tomax	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

Colour:

Advantages: · Greater durability due to additional corrosion protection

· Reinforced conductor material with higher breaking load

· Specifically for strong energisers (wildlife deterrent)

· White/blue: good visibility for animal and human



Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	JBmax	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 Advantages: · High conductivity

· Polyethylene monofilaments for high tensile strength

• Bundled **The max** - conductors for highest current flow

• High tensile loads can be absorbed due to particularly high and

reinforced outside edges (only for 17124)

 White with yellow outside edges: For more contrast to the Colour: 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	Jumax	Resistance	Colour	Unit	EAN
17116	ranger® FLU0 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	\bigcirc	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	\bigcirc	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	\bigcirc	1	4 014803 171153

horizont electric fence tape reflect T20

Excellent visibility thanks to integrated reflective strips

Suitable for: Medium to long fence lengths

Advantages: · Integrated reflective strips for excellent visibility

· High conductivity

· High breaking load thanks to reinforced conductor material

Colour: · White with light strip

• Blue with luminous stripes: good visibility for animals and humans



Art. No.	Designation	Width	Reel	Max. fence length*	Breaking load	Number of conductors	Tumax	Resistance	Colour	Unit	EAN
17114RFL	reflect T20-W	20 mm	200 m	15,000 m	~ 80 kg	4	0.30 mm	0.18 Ω/m		1	4 014803 171009
17114BRFL	reflect T20-B	20 mm	200 m	15,000 m	~ 80 kg	4	0.30 mm	0.18 Ω/m		1	4 014803 171016











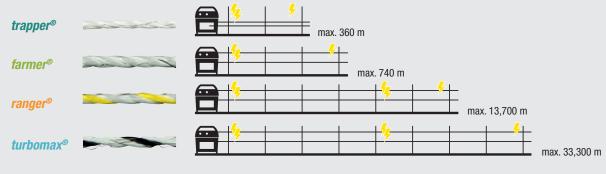




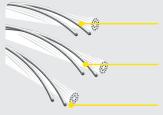




horizont electric fence ropes are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence rope for every individual application. When choosing the conductor material, observe the diameter and colour for optimum herding security.



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

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: Advantages:

- · Short fences and strip grazing with little vegetation
- The elasticity of the horizont fence rope makes it ideal for use on pasture gates in combination with gate

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	\circ	1	4 014803 438034
153372-400	farmer® R6	6 mm	400 m	740 m	~ 250 kg	6	0.20 mm	4.05 Ω/m	0	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®

Colour:

 Medium to long fences Suitable for:

Advantage: · High number of wires ensures high current flow

· Polyethylene threads with high tensile strength

· 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	TDmgx	Resistance	Colour	Unit	EAN
17182	ranger® R6	6 mm	200 m	13,700 m	~ 250 kg	6	0.22 mm	0.22 Ω/m	\bigcirc	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	\bigcirc	1	4 014803 438010



Suitable for: Long to very long fences with dense vegetation

 The The conductors ensure highest conductivity Advantages:

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	TD max-	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

· Mobile fences that are frequently assembled and dismantled • Strong conductivity due to high number of mixed conductors

Advantages: (copper and stainless steel)

Colour:

· 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

· 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	Ø Stainless steel conductor	Ø 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







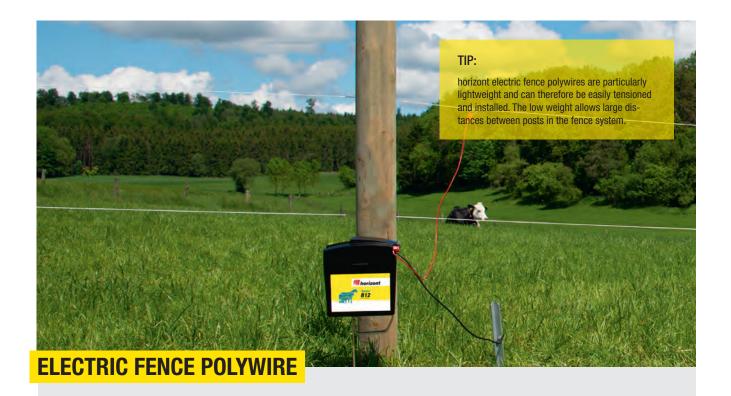




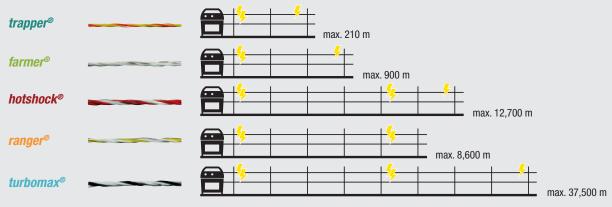




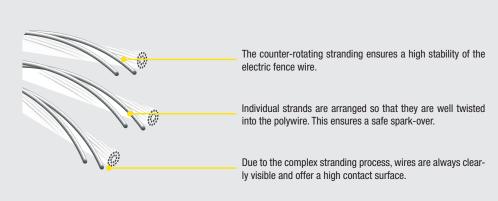




horizont electric fence polywires are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence polywire for every individual application. All horizont electric fence wires are clearly visible at twilight, which is important due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

Advantages: · 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 Advantages: · 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	\circ	1	4 014803 153470
15277	farmer® W9 - W	400 m	900 m	~ 70 kg	9	0.18 mm	3.33 Ω/m	0	1	4 014803 152770
15283	farmer® W6 - W	400 m	600 m	~ 60 kg	6	0.18 mm	4.98 Ω/m	0	1	4 014803 152831
15345	farmer® W3 - 0	250 m	300 m	~ 50 kg	3	0.18 mm	9.99 Ω/m	(1)	1	4 014803 153456

Electric fence polywire hotshock®

Suitable for: · Short to medium fences

Colour:

Advantages: • 5 times higher conductivity than stainless steel

· Longer durability through additional protection

• Specifically for strong energisers (e.g. sheep protection, wildlife defence)

· 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	TDmgx	Resistance	Colour	Unit	EAN
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

Advantages:

· 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	Tomax	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
17144-400	ranger® W3 - W	400 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	\bigcirc	1	4 014803 437976
17144-1000	ranger® W3 - W	1000 m	8.6 km	~ 160 kg	3	0.25 mm	0.35 Ω/m	\bigcirc	1	4 014803 437983



Electric fence polywire I turbomax®

Suitable for: Advantages: Colour:

- · Long to very long fences with dense vegetation
- · High conductivity and safe and high current flow
- 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	TDmax-	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

Electric fence polywire turbomax® braided wire

Suitable for: · Long to very long fences with dense vegetation

Mobile fences that are frequently assembled and dismantled

· Strong conductivity due to high number of mixed conductors (copper and

stainless steel)

Advantages:

Colour:

• 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

· 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





















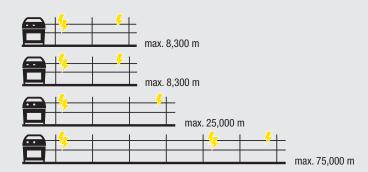
horizont electric fence wires are available in different series, which are characterized by the maximum fence length. horizont offers the appropriate electric fence wire for every individual application. For optimum herding security, observe the diameter and processing (solid or coiled wire) when choosing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

Original control wire

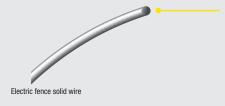
Steel wire

Stranded wire

Permanent fencing GALVADUR

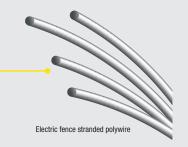


Maximum fence lengths: The length specifications show the maximum possible fence length of a level without vegetation with a correspondingly powerful energiser.



horizont 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 wire I Original Control Wire

Suitable for: · Short to medium fence lengths Advantages: · Safe voltage transition to the animal

Diameter

1.4 mm

Reel

1000 m

• Plastic core ø 1.5 mm

· Wrapped with 2 special conductors (galvanized iron wire)

Max. fence length*

8.3 km

Material:

Designation

Dederon

polywire

Art. No.

15833S



			A	
Resistance	Material	Unit	EAN	







Suitable for: · Medium fence lengths

Advantages: 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

Number of

 $0.35~\Omega/m$

Iron

2

Breaking load

~ 30 kg

Electric fence wire I Stranded wire

Suitable for: Medium fence lengths

Advantages: • 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
14134-400	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 I Permanent fencing GALVADUR

Suitable for: · Long fences

• The utilised steel wire is thickly galvanised with a special zinc/alumini-Advantages:

um 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
15945	GALVADUR	2.5 mm	625 m	75.0 km	~ 500 kg	1	0.04 Ω/m	galvanized	1	4 014803 159458



















Application: • Easy and safe to use in the electric fence tape

· Simple re-tensioning possible

Advantages: • Stable electric fence tape connector through one-piece galvanized

metal brackets supported by break-proof plastic

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













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



Zinc





Stainless Steel



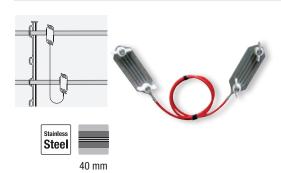


Electric fence rope/polywire connector

• For connection of electric fence polywires or ropes **Application:**

Advantages: · 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



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 polywire connecting cable

Application: • For the connection of electric fence polywires stretched over each other

· Cable length 50 cm

Advantages: • All high voltage cables with double insulation

50 cm









Art. No. Suitable for FAN Material Unit Electric fence ropes and galvanized steel, 10440C plastic

Electric fence wire connector

Suitable for

Electric fence wires

Art. No.

14197C

· Can apply tension of up to 400 kg to wires **Application:**

For connection of iron and steel wires

Material

Unit

hot-dip galvanized 10















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











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

Advantages:

Application: · Tensioner can be mounted directly into the fence mate-

rial at any point of the fence

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	Polypropyl- ene	□ 2	4 014803 149916















Electric fence wire tensioner I 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







Electric fence tensioning tool | Gripple

Application:

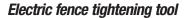
- For tensioning the wire with the Gripple wire connector (15967, 47GRIP0001)
- Up to 400 kg tension can be applied to wires
- Regulation of the tension force through integrated tension measurement

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









Application:

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

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









Fencing pliers

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

15653	Electric fence wires	Steel	□ 1	4014803 156532
Art. No.	Suitable for	Material	Unit	EAN





Reel for wire

Application:

· For winding and unwinding

Capacity:

• Electric fence wire GALVADUR Ø 2.5 mm (15945):

up to max. $625\ m$

Brake: Advantages:

· Via a screw • Incl. supporting foot

Material:

· Galvanized steel

Art. No.	Unit	EAN
15933	1	4 014803 159335





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.

134 | Guide

136 | Product guide

142 | Plastic posts

145 | Fibreglass posts

145 | Steel posts

148 | Recycling, wooden posts and accessories

149 | T-posts and accessories

THINGS TO KNOW ABOUT

POSTS

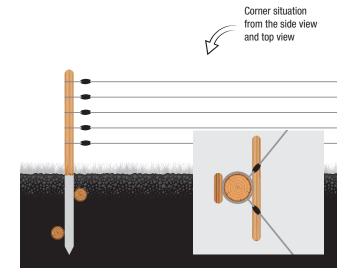
1. WHAT ARE THE DIFFERENT PURPOSES OF POSTS?

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 horizont. 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.



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 horizont are an inexpensive alternative.

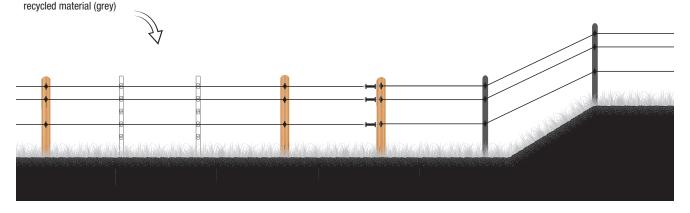
TIP: TILTING POSTS?

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.

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

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.



















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.













PRODUCT GUIDE



PLASTIC POSTS

Appl	ication		Features		Insula	tor		Suital	ole 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
	•	157	142	SB		•	4	4	8	8	Stirrup post, white (5 pcs.)	15108-5	140
	•	71	58	ET		•	2	3	2	5	Plastic post ranger®	14471-5	138
	•	71	58	DT		•	2	3	2	5	Plastic post ranger®	14379-5	138
	•	108	95	ET		•	3	5	2	10	Plastic post ranger®	14472-5	138
	•	108	95	DT		•	3	5	2	10	Plastic post ranger®	14380-5	138
	•	138	125	ET		•	4	5	3	12	Plastic post ranger®	14473-5	138
	•	138	125	DT		•	4	5	3	12	Plastic post ranger®	14381-5	138
	•	150	132	DT		•	3	5		8	Plastic post ranger®	15663-10	138
	•	106	85	ET	•						Plastic post long life	15375	140
	•	146	125	ET	•						Plastic post long life	15376	140
	•	171	150	ET	•						Plastic post long life	15377	140
	•	169	153	ET		•	4	6	3	13	Plastic post turbomax®	15812	140
	•	78	55	ET		•	2	4		6	Plastic post turbomax® smart post	14490	142
	•	115	92	ET		•	3	5	2	10	Plastic post turbomax® smart post	14491	142
	•	145	122	ET		•	4	6	3	12	Plastic post turbomax® smart post	14492	142

FIBREGLASS POSTS

Appl	Application Features			Insulator Suitable for*		ole 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	144



















STEEL POSTS

Appli	cation		Features		Insula	tor		Suitab	ole for*		Produc	:t	
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	144
	•	120	100	DT	•					•	Angular steel post	15877	146
	•	165	145	DT	•					•	Angular steel post	152541	146
		105	82	DT		•				•	Oval steel post with metal eye	150562	146
	•	106	80	DT		•				•	Oval steel post with ring insulator	150552	146

RECYCLED PLASTIC & WOODEN POSTS

Appli	Application Features		Insula	tor	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	148
•	•	175	120	grey	•		•	•	•	•	Recycled plastic post	15593	148
•	•	150	100	grey	•		•	•	•	•	Recycled plastic post	15151	148
•		230	150	Wood	•		•	•	•	•	Robinia post	14638	148
•		200	140	Wood	•		•	•	•	•	Robinia post	14637	148

T-POST

Appli	cation	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
	•	152	112	green		•	•	•	•	•	T-post ECO	145501	149
	•	167	127	green		•	•	•	•	•	T-post ECO	145511	149
	•	182	142	green		•	•	•	•	•	T-post ECO	145521	149

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



















Application: · For winding and unwinding and for partitioning off

pastures

· Well suited for mobile fences

• Electric fence polywire: up to max. 300 m Capacity:

· Electric fence tape: up to max. 100 m

Guide: Yes Brake:

Material: · Polycarbonate, with suspension device

Art. No.	Unit	EAN
10109	1	4 014803 101099
14052	1	4 014803 140524
15289	1	4014803 152893



Locking the brake



Winding and unwinding



Suspension device: Clipping the reel onto the fence material











Reel | TURBO ROLLER 3: 1

Application: · For winding and unwinding

• Electric fence polywire: up to max. 800 m Capacity:

· Electric fence tape: up to max. 300 m

Guide:

· Yes (trailing and parking brake)

Material: · Impact-resistant plastic, robust steel crank and

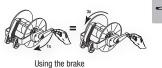
steel frame with suspension eyes

Advantages: · Roll-back lock, suspension eyelets

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















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

• 108 cm Total height: 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
	14472-5 14472-10 14380-5	14472-5 white 14472-10 white 14380-5 white	14472-5whiteSingle tread14472-10whiteSingle tread14380-5whiteDouble tread	14472-5 white Single tread 5 14472-10 white Single tread 10 14380-5 white Double tread 5

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

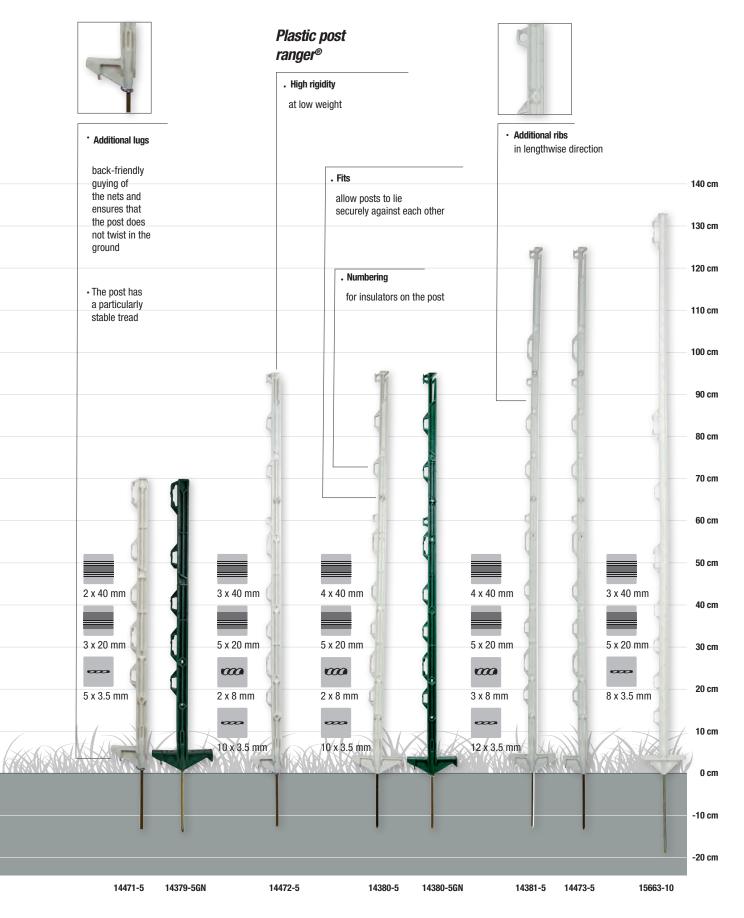
Eyes suitable for: • 3 x wide tapes up to 40 mm, 5 x wide tapes up to

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. Single tread Colour 4 014803 465818 15663-10 white Double tread

EXCLUSIVE ADVANTAGES OF THE NEW PLASTIC POSTS:





















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 4 014803 153753 ₾ 25 15375 white

Suitable for: • Insulators for clamping and all types of conductor material

Total height: • 146 cm **Height above ground:** • 125 cm • 21 cm, Ø 9 mm Earth spike: · Single tread Tread: Diameter: • Ø 19 mm

Art. No. 15376 white T 10

Suitable for: · Insulators for clamping and all types of conductor material

Total height: • 171 cm **Height above ground:** • 150 cm • 21 cm, Ø 9 mm Earth spike: Tread: · Single tread • Ø 19 mm Diameter:

Art. No. Colour 15377 white 10 10

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 15812 white

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 · Stirrup step Tread:

Art. No. Colour 15108-5 ⊕ 5 white

PLASTIC POST LONG LIFE - A GOOD CHOICE! · Very high durability - made of · Insulators can be individually a high-quality special plastic, adjusted in number and height Post is sealed at top - water therefore frost-proof · No seams, as the post is cast in cannot enter Plastic post one piece turbomax® · Transposed twist-PRODUCT TIP Stirrup post free profile · Cast from one mould Insulators are particularly · Sturdy design suitable for screwing or • Of glass fibre reinforced clamping / clipping polypropylene 150 cm Reinforced, twist-free profile 140 cm 15481 15480 130 cm 120 cm · Stirrup step ensures safe insertion and firm 110 cm stability · Eyes are opposite tread - free area for better 100 cm insertion · Additional insulator at base of post for inser-90 cm tion of earth conductor for better herding security 80 cm · An additionally reinforced and rounded tread frame with fluting ensures a firm tread 70 cm 4 x 40 mm 60 cm 4 x 40 mm 50 cm 4 x 20 mm Plastic post \boldsymbol{w} long life 40 cm 6 x 20 mm 8 x 8 mm · A strong, galvanised $\boldsymbol{\omega}$ tread frame provides 30 cm good stability in hard 3 x 8 mm ground and enables 8 x 3.5 mm easy insertion into FE / ZN 20 cm ground Continuous welding 13 x 3.5 mm of the post instead of 8 x 3.5 mm spot welding makes the 10 cm earth spike stable 0 cm · With injected, galvanized steel spike -10 cm -20 cm 15812 15375 15376 15377 15108-5







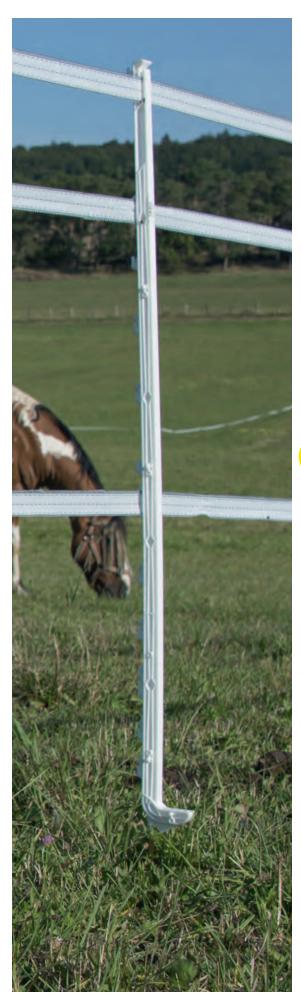












Plastic post turbomax® smart post

Eyes suitable for: \cdot 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 · Single tread 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:











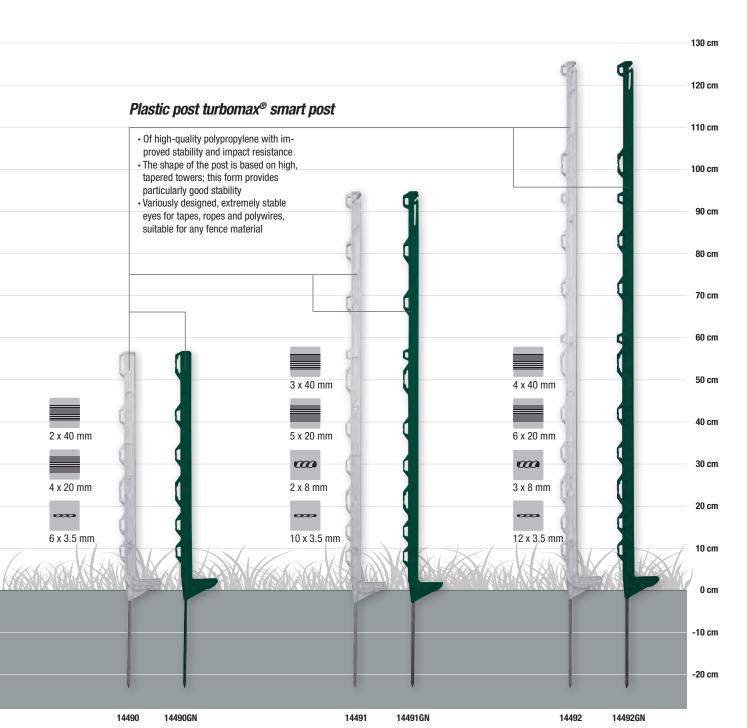
Cross-ribbing in post provides stability, so it can be subjected to higher tensile forces and is difficult to bend

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



















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: **Height above ground:** ∙99 cm Tread: · Single tread Diameter: • Ø 12 mm

Art. No.

10 4 014803 148865 14886 yellow

Steel post Pigtail

Suitable for: • 1 x wide tape up to 40 mm, 1 x rope up to 8 mm or 1

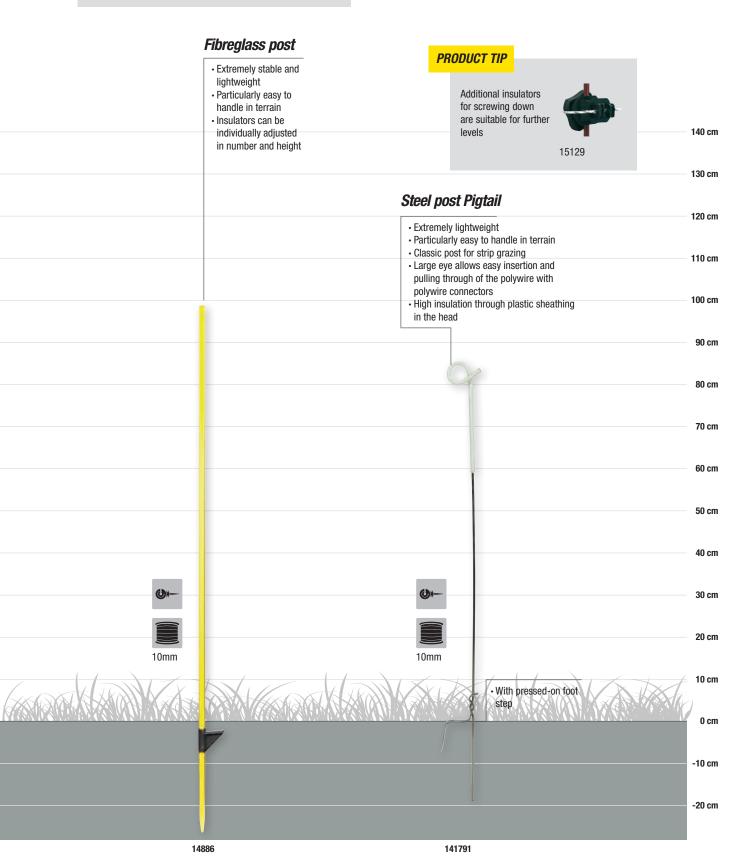
x polywire up to 3.5 mm and insulators for screwing on and clamping/clipping for all types of conductor

Total height: Height above ground: • 105 cm • 85 cm Earth spike: • Ø 7 mm · Single tread Tread: Diameter: • Ø 7 mm

Art. No. Colour Material

1014803453014 141791 Steel, galvanized ூ 30 white























Oval steel post with metal eye

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

15877	red	4 bore holes	1	0 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 152541* red 6 bore holes

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

150562 ₾ 25 red with metal eye

Oval steel post with ring insulator

Eyes suitable for: • 1 x polywires up to 3,5 mm and insulators for

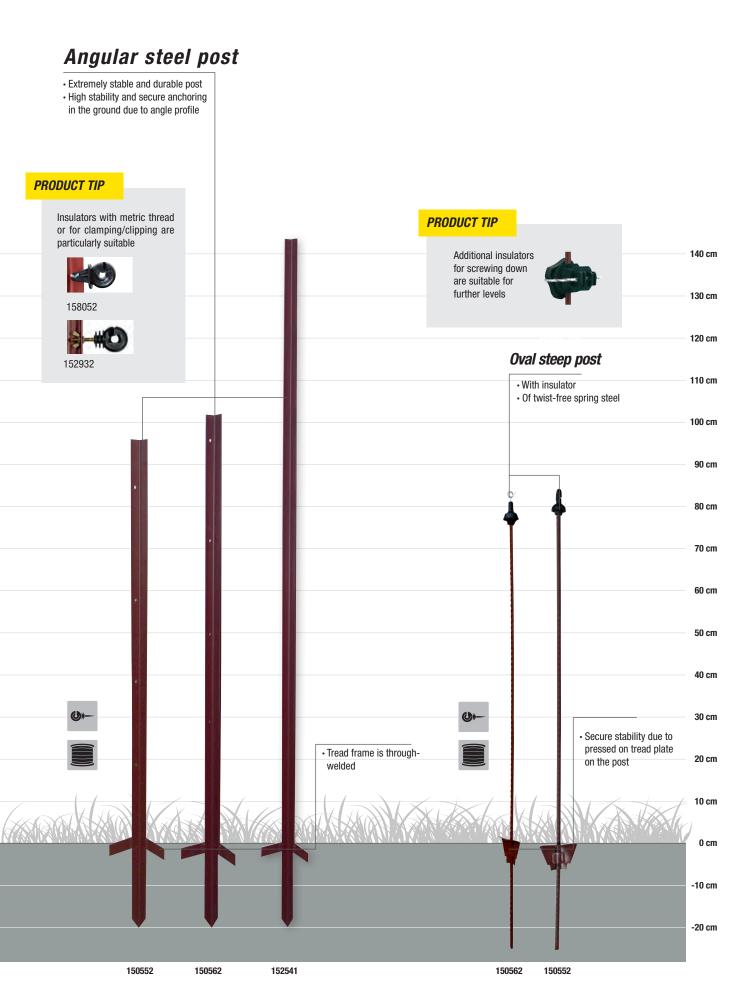
screwing on and clamping/clipping for polywires up

to 3.5 mm

Total height: • 106 cm Height above ground: • 80 cm · Double tread Tread:

Art. No. Unit Colour Design

150552 red with ring insulator ₾ 25





















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	<i>♀</i> 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

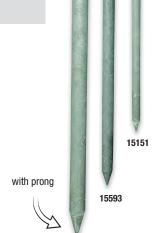
Art. No. 14637	Total height	Unit EAN \$\iii \text{150} \text{4.014803.146373}	
14037	200 CIII	4 014803 146373	

YOUR ADVANTAGE:

- · Processing with common tools (post does not splinter)
- · Manufactured of recycled plasticscan be recycled again
- · Unlimited durability guaranteed
- · Individual adjustment of holes
- Impregnation not necessary water cannot enter the post







15243

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	

Suitable for: · Insulators for screwing in, screwing on and nailing on

Total height: • 150 cm Height above ground: • 100 cm • Ø 4.5 cm Diameter:

Please note: Sold only by the pallet!

Art. No.	Colour	Unit	EAN
15151	grey	165	4 014803 151513

horizont T-Post ECO | Metal post

1.52 m | 1.67 m | 1.82 m

Our T-post ECO model is the durable and stable alternative to wooden posts. Made of rail steel, with an environmentally friendly, high-quality dip coating for surface protection, it is ideal for farmers and livestock owners.

Versatile application options: Thanks to its slim T-profile and the solid anchor plate, the post $\ensuremath{\mathsf{ECO}}$ can be driven into the ground effortlessly with a hand ram up to the long base plate, which ensures extremely high stability.

The posts are ideal for erecting wolf-repellent fences. The post can be used flexibly as a corner, section, gate, start or end post and therefore offers the right solution for every situation.

Art. No.	Total height	Height above ground	Unit	EAN
145501- 10	1.52 m	1.12 m	1 0	4 014803 477644
145501- 50	1.52 m	1.12 m	⋘ 50	4 014803 477651
145501- 100	1.52 m	1.12 m	100	4 014803 477668
145501- 200	1.52 m	1.12 m	200	4 014803 477675

Art. No.	Total height	Height above ground	Unit	EAN
145511- 10	1.67 m	1.27 m	1 0	4 014803 477682
145511- 50	1.67 m	1.27 m	⋘ 50	4 014803 477699
145511- 100	1.67 m	1.27 m	100	4 014803 477705
145511- 200	1.67 m	1.27 m	200	4 014803 477712

Art. No.	Total height	Height above ground	Unit	EAN
145521- 10	1.82 m	1.42 m	1 0	4 014803 477729
145521- 50	1.82 m	1.42 m	€ 50	4 014803 477736
145521- 100	1.82 m	1.42 m	100	4 014803 477743
145521- 200	1.82 m	1.42 m	200	4 014803 477750









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

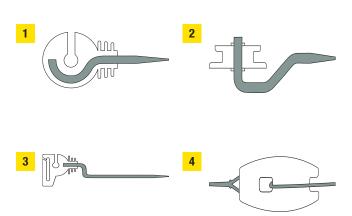
Sufficient herding voltage is of great importance for the operation of a electric fence. The insulators should have a very high insulating capacity as they insulate the conductor material against the post and the earth. The current flow is prevented between earth and fence and the required herding voltage is only applied in the fence material.

- **152** | Guide
- 154 | Product guide
- **158** I Insulators for wood and recycled plastic posts
 - · Tape insulators
 - · Rope insulators
 - · Polywire insulators
 - · Wire insulators
 - · Screw-in aids
 - · Fastening material
- 166 | Insulators for plastic and fibreglass posts
 - · Tape insulators
 - · Rope insulators
 - · Polywire insulators
- **168** | Insulators for steel posts
 - · Tape insulators
 - · Polywire insulators
- **169** | 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?**

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.

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 horizont 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 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 horizont 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



Continuous support



Conductor material is fixed



Short support



Section/ quide insulator



Diameter support



insulator



Length of support





UV resistant Polycarbonates



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



Tape

w Rope



Polywire



Wire

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	8	4		•
•	•				40	8	4		•
•	•				40	8	4		•
•		•			20	8	4		•
•					20		4		•
•					40				
•					40		4		
•	•				40	8	4		
	•					8	4		
•	•					8	4	2.5	•
•	•				13		4		•
•	•				13		4		
•					13		4		•
•		•	•		13		4		•
•							3		
•	•				13		4		
•	•				13		4		•
•		•	•		13		4		•
•	•						4	2.5	
•	•				40	8	4		6















FOR WOOD AND RECYCLED PLASTIC POSTS

Support	Appli	cation	F	Product	
Continuous	Fixed	Free running	Designation	Art. No.	Page
		•	Tape insulator combi 40	15828C	158
		•	COMBI40GREEN	14668	158
		•	Tape insulator combi 40	15390EI	158
		•	Tape insulator ranger® 20	15186	159
		•	Tape insulator ranger® 20	15555-25	159
	•		Tape insulator ranger® 40	14162C	159
		•	Tape insulator ranger® 40	15460C	159
	•		Tape insulator turbomax® plus	15843C, 15837C	160
		•	Rope insulator farmer® corner plus	100121-10	160
		•	Rope insulator turbomax®	15835C	160
		•	Ring insulator trapper® IS-S	14493-50	161
		•	Ring insulator farmer® plus	15364	161
		•	Ring insulator farmer®	15275GE, 14957EI	161
		•	Ring insulator farmer®	14937	162
	•	•	Slotted insulator farmer®	15278	162
•		•	Ring insulator ranger® plus	15370, 15370El	162
		•	Ring insulator ranger®	15461, 15461-50	163
		•	Ring insulator ranger®	15595	163
		•	Pin-lock insulator	14933-50	163
		•	Tape insulator combi 40	15682	158

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
•				•	40		4		
•				•	12		4		
•					40	8	4		
•				•		6	4		
•				•			4	2.5	
•				•	13	6	4		
•							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			

	Suitable as					Conducto	or 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				

FOR PLASTIC AND FIBREGLASS POSTS

Support	Application		Product			
Continuous	Fixed	Free running	Designation	Art. No.	Page	
	•		Replacement/additional insulator farmer® 40	14969-25	165	
		•	Replacement/additional insulator farmer® ip-19	15474C	165	
		•	Replacement/additional insulator long life	15481	165	
		•	Replacement/additional insulator farmer ip-15	15129	166	
		•	Replacement/additional insulator clip master	14904C	166	
		•	Replacement/additional insulator combi ip-15	15290	165	
		•	Head insulator	14922	166	
		•	Replacement/additional insulator farmer® fiber	14046C	166	
		•	Replacement/additional insulator long life	15480	167	
		•	Replacement/additional insulator long life	17801F, 17804F	167	

FOR STEEL POSTS (ROUND, OVAL AND ANGLE STEEL)

Support	Application		Product				
Continuous	Fixed	Free running	Designation	Art. No.	Page		
		•	Replacement/additional insulator farmer® plastic	15054-50	167		
		•	Splint insulator farmer® splint	158052	167		
		•	Ring insulator metr. Thread farmer® metric	15293, 152931, 152932	168		
		•	Replacement/additional insulator farmer® clip	150511	168		

FOR T-POSTS

Support	Application		Product				
Continuous	Fixed	Free running	Designation	Art. No.	Page		
		•	Top insulator	145601	169		
		•	Rope insulator	145621	169		
		•	Ring insulator	145681	169		
		•	Tape insulator	145641	169		





















Tape insulator I 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

Advantages: • Large dry room = High insulation

Application: Free running · Short, Ø 6 mm Support:

> Art. No. Unit 1044002450204 10 15828C





















120 mm

6 mm

40 mm

4 mm 8 mm

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

Advantages: • Large dry room = High insulation

Application: Free running Support: · Short, Ø 6 mm

Art. No.	Colour	Unit EAN
15682	black	□ 30 4 014803 156822
15390EI	black	♥ 80 4 014803 413147



















6 mm 40 mm 4 mm 8 mm

Tape insulator ranger® ISD-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

Advantages: • 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 · Short, Ø 6 mm Support:



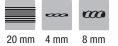












6 mm

Tape insulator ranger® IS-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 Advantages: · Closure support creates secure hold

Application: · Free running Support: · Short, Ø 5 mm

Art. No. Unit

15555-25 □ 25







20 mm



4 mm

Tape insulator ranger® equiblock plus

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











5 mm





Tape insulator ranger® 1-40

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

Advantages: · Opposing clamps prevent the tape from "falling out"

even in hilly terrain

Application: · Free running

Art No

















40 mm 4 mm















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 ADVANTAGES:

- · 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.

















8 mm

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 · Short, Ø 7 mm Support:

Art. No.

100121-10 □ 10





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 Advantages: · Ergonomic shape for optimal handling

Application: Free running Support: · Short, Ø 6 mm

Art. No. 15835C 18



















4 mm

8 mm

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: · Short, Ø 5.3 mm

Art. No.	Offic	EAN
14493-50	T	



























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

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

Art. No.	Colour	Unit	EAN
15275GE	yellow	□ 25	4 014803 417602
14957EI	black SET "farmer box": 97 ring insulators 15275, 2 gate handles 15817SW, 1 screw-in aid 15357	₿80	4 ⁰ 14803 443441





































200 mm 6 mm 13 mm

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

14937	□ 10	4 014803 149374
Art. No.	Unit	EAN













Slotted insulator farmer®

 Section insulator Suitable as: Conductor material: • Polywire up to 3 mm

Fastening: · Screwing in to wood or recycled plastic posts

Advantages: · Cross-reinforced dry room **Application:** · Free running or fixed

• Ø 5 mm Support:

Art. No.	Colour	Unit EAN	
15278	black	□ 50 4 014803 15	2787





















Ring insulator ranger® plus

Suitable as: · Section insulator, starting/corner insulator Fastening:

Conductor material: • Tape up to 13 mm, polywire up to 4 mm · Screwing in to wood or recycled plastic posts

Advantages: • Large dry room = High insulation · Very high electric strength

• Free running Application: Support: • Continuous, Ø 6 mm

Art. No.	Colour	Unit EAN
15370	black	□ 25
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

Advantages: • Large dry room = High insulation

Application: · Free running • Short, Ø 6 mm Support:

Art. No.	Unit	EAN
15461	□ 25	4 014803 154613
15461-50	□ 50	4 014803 405357









6 mm



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

• Large dry room = High insulation Advantages:

· Because of the lateral ground position, the tape cannot

"fall" out of the insulator unintentionally, even if guided

over hill and dale · Free running Application:

· Short, Ø 6 mm Support:

Art. No. Unit □ 10 15595























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 14933-50 □ 50















4 mm 7 mm 2.5 mm

















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

EAN Art. No. Unit

1 014803 141644 14164 □ 25



Porcelain insulator

Suitable for: · Permanent fencing wire Galvadur

Art. No. Unit EAN □ 10 15925





Insulating tube

Conductor material: • Wire

Application: · Insulation of wire on wooden posts for electrified fence

Length: • 25 m Material: Plastic

Art. No. Diameter Unit 15935 interior Ø 5 mm, exterior Ø 10 mm 1





Screw-in aid

Suitable for: **Application:** • Ring insulators, rope insulator, gate handle insulators

• 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

15290 □ 25

















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.

14969-25 □ 25













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 1014803 405739 15474C 10













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

• Free running **Application:**

Art. No.

4 014803 154811 15481 □ 25



















4 mm 8 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













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











2 mm

Head insulator

Suitable as: · Section insulator

Suitable for: • Fibreglass posts with Ø 12 mm (14886)

Conductor material: • Polywire up to 2 mm

14922	□ 50	4 014803 149220
Art. No.	Unit	EAN

















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. 14046C 25

Replacement/additional insulator long life

Suitable as: · Section insulator

• Posts with Ø 19 mm (15375-15377) Suitable for:

Conductor material: • Tape up to 13 mm, polywire up to 4 mm, rope up to 8 mm

Application: Free running

Art. No. Unit 15480 □ 25

















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

















8 mm

Replacement/additional insulator farmer® plastic

Suitable as: · Section insulator

• For oval steel posts (150561) Suitable for: Conductor material: • Polywire up to 4 mm Application: · Free running Metal eye Material:

15054-50	□ 50	4 014803 405319
Art. No.	Unit	EAN











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 · Free running **Application:**

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 • Free running **Application:**

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. 150511 □ 25





horizont strain insulator

Suitable as: · Stretching insulator Conductor material: • Polywire, ropes and wire **Application:** • Guying of the fence section

Material: Plastic

Art. No. Unit 15070 □ 10



Top insulator

Suitable as: Section insulator

• T-post ECO (145501, 145511,145521) Suitable for:

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 4 014803 157744 145601 □ 10













Rope insulator

Suitable for: • T-post ECO (145501, 145511,145521) Conductor material: • Rope, polywire and wire up to 6 mm Fastening: · Clip on for quick assembly













6 mm







6 mm

Ring insulator

Suitable for: • T-post ECO (145501, 145511,145521) Conductor material: • Rope and polywire up to 6 mm **Fastening:** · Clip on for quick assembly

Art No Unit

145681 □ 25













6 mm 6 mm

Tape insulator

• T-post ECO (145501, 145511,145521) Suitable for:

Conductor material: • Wide tape up to 50 mm Fastening: · Clip on for quick assembly

Art. No.

















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.

172 | Gate handles

171 | Gate handle insulators

171 | Gate handle insulators and gate handle sets







Gate handle with hook trapper®

Spring travel limit: • 5 cm Material: Plastic Colour: Black

Art. No. Unit 4 014803 477231 141722SW







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
158170R	orange	1	4 014803 417879
15817HG	bright green	1	4 014803 444660







Gate handle with eye farmer®

Spring travel limit:

• 3 cm

Advantages:

· Low risk of injury, as the eye, unlike the hook, cannot

tear into the hand Plastic

Material:

Fastening: Colour:

· Eye for conductor material on handle

• Black

Art. No. Unit FAN 4 014803 140807 14080SW







Gate handle with hook ranger®

Spring travel limit:

None

Advantages:

· Safe handling due to extra wide flanges

Material:

Plastic

Fastening: • Eye for conductor material on handle

Colour:

Black

15295 1



Gate handle with hook ranger®

Spring travel limit: • 5 cm

Advantages: · Reinforced insulation, therefore suitable for use with powerful equipment

· Stainless steel rotating pressure spring

Material: Polycarbonate

· Eye for conductor material on handle Fastening:

Colour: · Transparent dark grey













Gate handle with hook and tape connector turbomax®

Spring travel limit:

· With the mounted tape connector, a tape up to 40 mm wide can be attached directly Advantages:

to the gate, thus ensuring optimum gate opening

· The tape can be easily re-tensioned

Material: • Black Colour:

1 151391GNV









Gate handle with hook turbomax®

Spring travel limit: • 8 cm

Advantages: · Extremely durable and compressible pressure spring

Material: Polycarbonate

Fastening: · Eye for conductor material on handle

Colour: · Transparent yellow











Gate handle with hook turbomax®

Spring travel limit: • 8 cm

Advantages: · Extremely durable and compressible pressure spring

Material: Plastic

Fastening: · Eye for conductor material on handle

 Black Colour:

FAN Art. No. Unit 15139E







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

· For screwing in to wood and recycled plastic posts **Application:**

Colour: Black

Support: · Insulator support with thread for wood

Art. No.	Unit	EAN
14175	□ 10	4 014803 141750
15126C	□5	4 014803 405616





Gate handle insulator non-twisting

Suitable for: \cdot 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 Advantages: · Eyes do not twist away when the gate is inserted

Colour: · Black

Support: · Insulator support with thread for wood

Art. No. Unit □ 10 14866-10







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: Advantages: · For screwing in to wood and recycled plastic posts • The conductor material can be connected safely and

without damage with a thimble

Colour:

· Insulator support with thread for wood Support:

Art. No. 4 014803 141705 14170C **2**

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

Advantages: · 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

ℂ2 15307C









2.5 mm

Gate handle set with spring

Application: · Especially suitable for easy opening

and closing of gates through electrically conductive tension spring

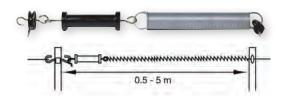
Scope of delivery: 1x gate handle turbomax with hook

• 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

Unit

1

Art. No

15316C

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)

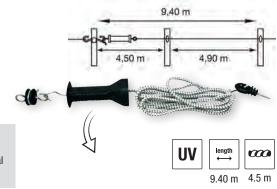
1x gate handle insulator

1x ring insulator

CATTLE FARMING



These gate handle sets are designed for optimal use in cattle farming.



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

0.5 - 5 m

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.



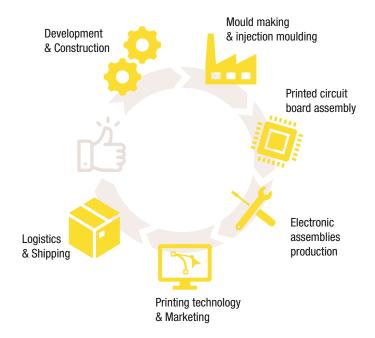
Α		Polywire connecting cable	128	Н	
		Tape connecting cable Earth,connecting,supply cable	128 83		
Angular steel post	147	Connectors	03	Head insulator	166
		Electric fence rope connector	128		
В		Electric fence rope/polywire connector	128	1	
<u>D</u>		Electric fence tape connection	128	<u> </u>	
Batteries		Tape connector	128	Insulating tube	164
6 V block battery	69	Wire connector	129	Insulators	
9 V alkaline battery turbomax®	69			Additional insulators	
9 V zinc-carbon battery ranger®	69	-		clip master	166
12 V battery special	70	<u>E</u>		combi ip-15	165
12 V battery super fleece / AGM	70	Earth stakes and spiked posts		farmer® 40	165
Battery boxes	71	for energisers	82	farmer® clip	168
Battery connecting cable	71	Earth stake and spiked post with bracket	82	farmer® fiber	166
Battery energisers 9 V farmer® ABN30	23 25	Earth cable	83	farmer [®] ip-15 farmer [®] ip-19	166 165
ranger® ABN60	28	Electric fence connectors	128	farmer® plastic	167
Greenline ABN30	24	Electric fence gates		long life	165
trapper® B12	27	Hotgate gate for pasture fence netting	107	Corner / strain insulator	168
trapper® B22	27		22-125	Head insulator	166
Battery energisers 12 V	29		20, 121	Pin-lock insulator	163
farmer® AN300	35	Electric fence tapes 1 Electric fence wire	17-119	Porcelain insulator	164
farmer® AN500	35	Electric fence wire connector	127 128	Ring insulators	
farmer® AN1000	37	Electric fence wire connector	120	Ring insulator	161
farmer® AN1000Solar	37	Electric fence wire Original Control Wire	127	Ring insulator farmer®	161
hotshock® A300 hotshock® AN490	38 39	Electric fence wire stranded wire	127	Ring insulator ranger®	163 162
ranger® AN490	39 41	Energiser and earth connection kit	84	Ring insulator ranger® plus Ring insulator trapper® IS-S	162
ranger AN2000	43	ŭ		Rope insulators	101
ranger® AN3000	43			Rope insulator	169
ranger® AN4800	43	F		Rope insulator farmer® corner plus	160
ranger® AN360	41			rope insulator for T posts	169
trapper® AN45	33	Fence connection	83	Rope insulator turbomax®	160
trapper® AN80	33	Energiser and earth connection kit	84	Slotted insulator	162
trapper® AN45	33	Fence connection kit	84	Splint insulator farmer® splint	167
turbomax® AN800	44	Fence connection terminal	84	Strain insulator	168
turbomax® AN800-D	31	Fence connection kit Fence switch	84 87	Tape insulators	1.50
turbomax® AN1200-D turbomax® AN1500-D	31 31	Fence tester	85, 8 6	Tape insulator combi 40 Tape insulator for T posts	158 169
Boundary nets	108	Fence tester farmer®	86	Tape insulator ranger® 20	159
Barriere fences	109	Fence tester Isotester 6000	85	Tape insulator ranger® 40	159
		Fence tester Neonlight	85	Tape insulator turbomax® plus	160
		Fence tester ranger®	86	Top insulator	169
C		Fence tester ranger® Voltmeter DUAL Dig		top insulator for T posts	169
		Fence tester trapper®	86	Wire insulator economy	164
Chargers	72	Fence tester turbomax® Fence scout	86		
Charger Charge Box 3.5 - 7.0 A	72	Fencing pliers Fibreglass posts	130 144	Insulators for plastic and	40= 40=
Conductor material		Flexible gate/fence/underground cable	82	fibreglass posts Insulators for steel posts	165- 167 167-168
Polywire	100	Tickibic gate/felloc/ullucigioullu cabic	02	Insulators for T-posts	167-166
Electric fence polywire farmer® Electric fence polywire hotshock®	123			Insulators for wood and recycled	105
Electric fence polywire notshock [®]	123 124	G		plastic posts	158-164
Electric fence polywire tranger Electric fence polywire tranger	123	<u>u</u>		F	
Electric fence polywire turbomax®	124	Gate cable, flexible	82		
Electric fence polywire turbomax® braided		Gate handle insulators	174	L	
Rope		Gate handle insulator non-twisting	174		
Electric fence rope farmer®	120	Gate handle insulator with metal plate	175	Lightning protection choke	87
Electric fence rope ranger®	121	Gate handle insulator with wooden thread	174	LUDA FenceAlarm 2	87
Electric fence rope turbomax®	121	Onto hamilton	470		
Electric fence braided rope turbomax®	121	Gate handles	172		
Tape	110	with eye farmer® with hook and tape connector turbomax®	172 173	M	
Electric fence tape farmer® Electric fence tape reflect T20	118 119	with hook farmer®	173		
Electric fence tape reflect 120 Electric fence tape hotshock®	119	with hook ranger®	172	Mains energisers 230 V	
Electric fence tape notshock [®]	119	with hook trapper®	172	farmer® N200	49
Electric fence tape turbomax®	118	with hook turbomax®	173	hotshock® N500	50
Wire		Gate handle sets	175	ranger® N270 ranger® N420	47 47
Electric fence wire iron	127	Gate handle set with rope	175	scout N2	47 51
Electric fence wire Original Control Wire	127	Gate handle set with spring	175	scout AS	51
Electric fence wire stranded wire	127	Gate handle set with thin spring	175	trapper® N45	48
Connecting cable	83			turbomax® N1430	52

N		rope insulator for T posts Rope tensioner	169 129	W	
Notting		nope tensioner	123	Warning sign international	02
Netting Poultry				Warning sign, international Wire connector	83 129
Poultry netting with fibreglass		S		Wire tensioner	129
posts 110 cm	105			Wolf defence netting	99
Poultry netting with fibreglas posts 120 cr		Screw-in aids	164	g	
ranger® poultry netting 105 cm	106	Sheep and goat netting	94		
ranger® security poultry netting	106	Slotted insulators	162		
horinetz high energy sheep and goat netti	ng 95	Small animal netting	108		
horinetz sheep and goat netting	94	Solar bracket	77		
turbomax® Extra sheep and goat netting	96	Solar bracket	77 77		
Vertical sheep and goat netting farmer® super Small animal netting	97 108	Solar bracket with spiked post Solar energisers	11		
farmer® sheep net 90 cm	98	farmer® AS50	57		
Spare parts for electric nets	109	farmer® AS180	58		
Wolf deterrent		ranger® AS180	60		
horinetz super plus wolf deterrent netting	101	ranger® AS120	60		
horinetz super wolf deterrent netting	100	ranger® AS1000SC	55		
turbomax® braided wolf deterrent netting		ranger® AS1800SC	55		
turbomax® earth wolf deterrent netting	103	trapper® AS25	56		
turbomax® wolf deterrent netting	100	Solar kits Solar kit 2 watts	74		
		Solar kit 2 watts	74 74		
0		Solar panels	74		
0_		Solar panels 5 watts	74		
Oval steel posts	146	Solar panels 10 watts	75		
Oval Steel posts	140	Solar panels 20 watts	75		
		Solar panels 30 watts	76		
P		Solar panels 50 watts	77		
		Steel post	144		
Plastic posts	138	Stirrup post	140		
Pliers		Strain insulator	168		
Fencing pliers	130				
Polywire connecting cable	128				
Polywire connector	128	Т			
Polywire insulators	161	<u></u>			
Portable box for 12 V energisers Portable / vandal proof boxes	72 72	Tape connecting cable	128		
Post extractor	149	Tape connector	128		
Post rammer	149	Tape insulator for T posts	169		
Posts		Tape insulators	158		
Fiberglass post	144	T-earth stake	82		
Plastic		Tensioner	100		
Plastic post long life	140	Electric fence polywire/rope tensioner Electric fence rope tensioner	129 129		
Plastic post ranger®	138	Electric fence tensioning tool Gripple	130		
Plastic post turbomax®	140	Electric fence tightening tool	130		
Plastic post turbomax® smart post Recycled plastic post	142 148	Tensioning tool	130		
Replacement post	109	Tightening tool	130		
Robinia post / natural, rough debarked	148	Top insulator	169		
Steel		top insulator for T posts	169		
Angular steel post	147	T-post accessories			
Oval steel post with metal eye	146	Post rammer with handle	149		
Oval steel post with ring insulator	146	T-post extractor T-post ECO	149 149		
Steel post Pigtail	144	T post ECO 1,82m	149		
Stirrup post	140	T post ECO 1,67m	149		
T-post ECO Poultry netting	149 105	T post ECO 1,52m	149		
rountly netting	103	,			
R		U			
Pagualad plactic page	1/10				
Recycled plastic post Reels	148	Underground cable	82		
Reel Maxi Roller 2000 & 4000	131	Underground cable, flexible	82		
Reel Mini Roller 300 PC	131				
Reel for wire	130				
Replacement/additional insulators	165	V			
Replacement posts	109				
Ring insulator	161	Vandal proof box I electrifiable	73		
Rope insulators	160				



FROM A SINGLE SOURCE

horizont 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 production facilities in Germany. In addition to our focus on electric fencing and animal husbandry products as well as mobile traffic safety technology, we also develop and produce special (electronic) products and customised digital signage solutions.





Consultation

Do you have any questions about electric fencings? 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
- in www.animalcare.horizont.com/linkedinAC



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!

Your horizont dealer:

horizont group gmbh **Animal Care**

Homberger Weg 4-6 34497 Korbach, Germany

+49 (0) 56 31 / 5 65 - 1 00

+49 (0) 56 31 / 5 65 - 1 20

animalcare@horizont.com

www.animalcare.horizont.com





All information is subject to typesetting and printing errors. Subject to price changes, product changes and errors. Reprinting, including excerpts, and use of the images only after receiving prior written permission from horizont group gmbh.