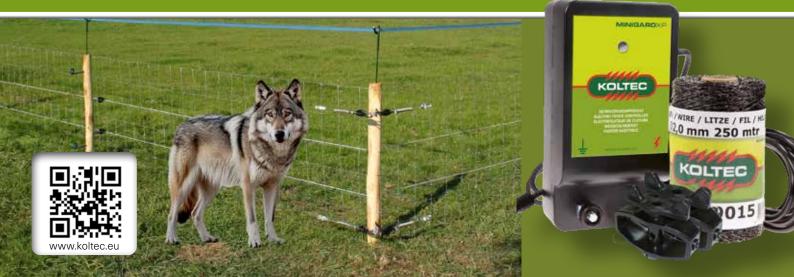


ELECTRIC FENCING



ELECTRIC FENCING FOR ALL ANIMALS



KOLTEC: DUTCH TOP QUALITY FOR MORE THAN 80 YEARS



KOLTEC -The specialist in electric fencers- has been going for a while. KOLTEC was established in 1942 and focuses from 1945 completely on the production and application of electric fences. With own injection moulding machines, transformer winding machines and printed circuit board production, KOLTEC has the product development and production at home.

A good electric fence consists of several parts, such as among others an electric fencer, insulators, conductors, connections and earthing. To have this function effectively it is important that it is adjusted to the animal type and environmental factors such as for example growth of weeds/grass. Besides that it can only function properly if regular maintenance is carried out.

KOLTEC tries in her advice and product range to make it as easy as possible for her users to install a good fence and also keep it functional. We do everything we can to put together products in a practical way. For example we make pre-mounted solutions that help installer to build a fence quicker. This in turn allows them to keep installation costs low.

FOCUS ON ONE PRODUCT

The focus of our family business lies completely on electric fencers and related products. This is unique compared to other providers of this type of equipment. Important to mention is that the KOLTEC products are of top Dutch quality. KOLTEC is a Dutch producer, also works together with local, specialised production companies and buys were possible her parts in the Netherlands.

FLEXIBILITY, CREATIVITY AND QUALITY

KOLTEC has established inside her quality system core values. In the first place we are, thanks to our small size, very flexible. Within our production we can switch quickly to the needs of our customer. That we create solutions for nature organisations worldwide, like World Wide Fund for Nature, landscape managers and zoos, endorses that we are also creative. In addition, quality is our top priority, a core value endorsed by our ISO certification. Our fencers are all delivered with 5 year warranty.



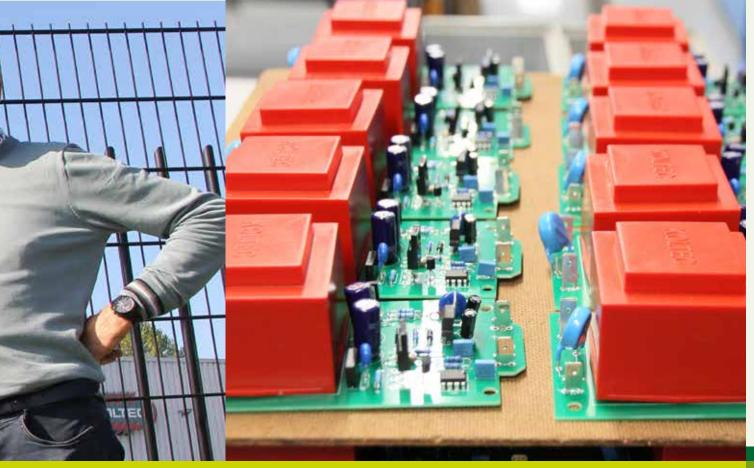
SOCIAL AND SUSTAINABLE

Furthermore KOLTEC is also a social company. Social to our staff members and we offer work to local day care for the disabled and sheltered employment agencies. As company we do a lot to produce sustainable. Our complete electricity need is amply covered by the electricity production from solar panels on the roof of our business premises. The fencers we develop and produce should also be economical in use, especially if they function on a battery, wet cell battery or in combination with a solar panel. Furthermore, we want to manufacture as many products as possible locally to keep the CO2 emissions from transport as low as possible. Also this year we have taken another 3 new moulds into use, with which we can produce even more products ourselves.

We have had a challenging year. Due to international developments, 2024 will also be a year full of challenges. Developments over which we have no control. We anticipate them with our purchasing and production. We will continue to do our utmost to ensure that we remain a reliable producer/ supplier.

Hilko Dammer

Managing Director



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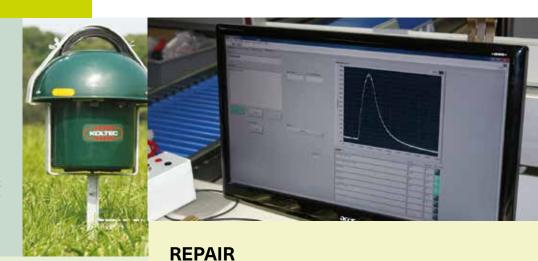
ABOUT KOLTEC

HISTORY

KOLTEC BV was established in 1942 in Breda. Since 1945 there is the production of electric fencers.

The present ST, the mushroom model, was basically the first fencer that was produced.

KOLTEC BV is still a family business that has specialized in the production and utilization of electric fences.



SERVICE

Our skilled employees take care for a good advice before and after the product is bought. Satisfied users are our most important business card. Feed back from users about the installation of an electric fence, inspires us to develop better and new products. KOLTEC has skilled technical employees, who take care of the repair of broken devices, but also develop new devices. Because this is in one hand, the experience of end users is used to develop better products.

PRODUCTION

All devices and part of the accessories which are sold by KOLTEC are produced, assembled and packed in our factory in Breda, Holland. You are buying a real Dutch made product.



DELIVERY SERVICE & STOCK

Because we produce most of our product range ourselves, the delivery service is very fast and flexible. Our goal is to have seldom out of stock positions.



RESEARCH AND DEVELOPMENT

On our own departement R&D new products are developed. Besides developing and testing new concepts, there is also done field research e.g. for testing and improving new conductors.





5 YEARS WARRANTY!

KOLTEC improves its internal organization every year. It also constantly improves the quality of its products.

In 2017 this resulted in obtaining the ISO 9001 certificate. Every year the KOLTEC organization is audited by an external agency to check whether KOLTEC still complies with the ISO 9001 standards.

To also underline the superior quality of our devices, KOLTEC gives a 5 YEAR WARRANTY with the purchase of a **KOLTEC** energiser.

As an aid, you can register the purchase of your KOLTEC energiser on the KOLTEC website. But for a warranty request, submitting your proof of purchase is also sufficient. The warranty conditions can be found on the website

www.koltec.nl/service/ warranty



KOLTEC = more than 80 years your guarantee for superior DUTCH quality.



Page 1 of 1

ISO 9001

Certificate

for the quality management system according to

NEN-EN-ISO 9001:2015

The certification body TÜV NORD Nederland hereby confirms that the certification took place in accordance with its certification regulations for the organisation

Koltec B.V. Spinveld 39 4815 HV Breda The Netherlands

The management system and the application thereof complies with the requirements of the standard. The certification is subject to annual evaluation by TÜV NORD Nederland.

The designing, production and sales of electric fencers, electrostimulation equipment and fencing accessories.

Registration number 26895-3.2

15-06-2023 15-06-2026 15-06-2017

Mr. E.W.A.C. Franken Managing Directo



TÜV NORD Nederland B.V. Ekkersrijt 4401, 5692 DL Son en Breugel The Netherlands



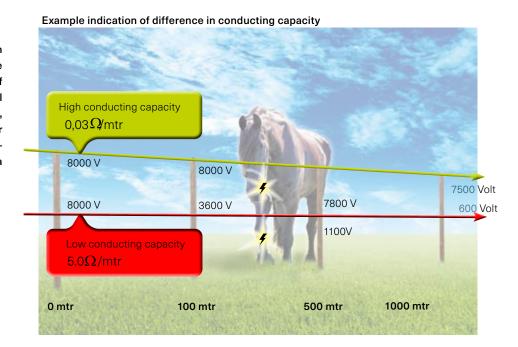


KOLTEC

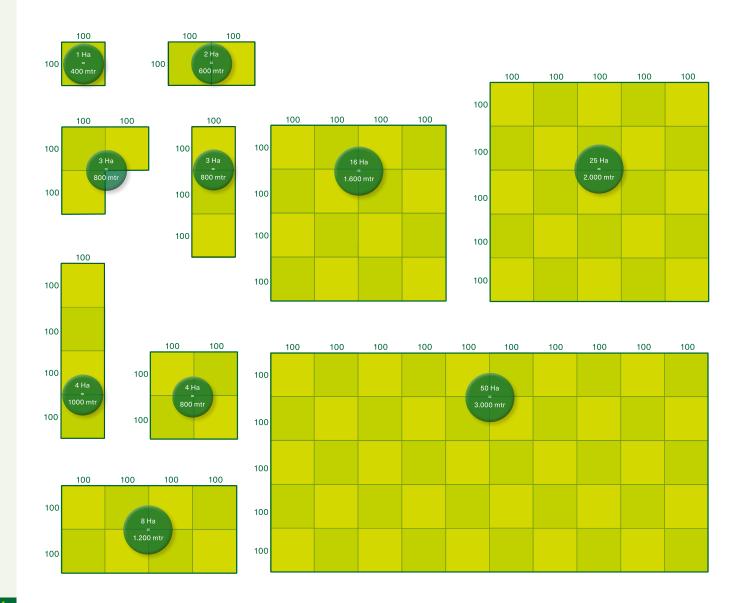
CEE Application length

This is the length of your fence, based on an ideal wire at one meter and at 20 degree celcius, where the tension at the end of the wire is still 1.500 Volt. This length will be shorter with wires on lower heights, vegetation growth and wire with a higher resistance. The length will again be influenced negative by the use of poly wire with a higher resistance.

"From 1.500 Volt a shock is starting to be effective for animals."



Application length (Single):



Energisers



Supply on 230 Volt Mains



Supply on 9 or 12 Volt battery, consumption is less than 50 mA



Supply on 12 Volt battery, consumption is higher than 50 mA

One feels this energy when one is touching the fence wire.



Consumption in milliampère (mA) or Watt

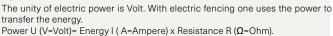


Peak power, the tension without connection to a complete fence



Tension that remains after the touch of an animal (500 Ohm)







Stored energy, energy that is gathered out of the supply source



Impulse energy, the energy max, produced by the device when touched by an animal (500 Ohm)



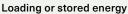
Energy which is being put off as power to the wire per shock/impulse, one measures in Joules. 1 Joule = 1 Watt (W) per second,= R*[I2*dt



Info by digital display



Alarm at tension drop under 2.000 Volt



The loading energy of the fencer shows how much energy is being absorbed from the power source (mains, (wet) battery) into the capacitor.

A higher stored energy means that the fencer uses more energy. The proportion between stored energy and the impulse energy shows the efficiency of the fencer. A high proportion means that much energy is getting lost, and not applied to the conductors.

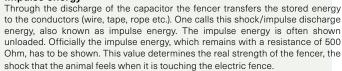


On/off switch at hand



Third connection with half output tension

Impulse energy





High-low-switch, which switches automatically based on the light.

Changing tension

levels in case of

growth and other

short circuits

the battery



High-low-switch for energy saving



Growths indication by LED



Discharge protection, takes care that the battery is not charged lower than 10,5 Volt.



Maximum fence length in Km according CEE statement (Capacitive)



Charge indication of



Also mains option



5 year warranty on energisers



Maximum fence length in Km by no growth on a fence



Solar panel at hand or optional



Battery control function



Connection set enclosed



Maximum fence length in Km average growth on a fence



Build-in lightning



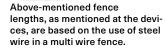
Safety time delay for the boost function



Return voltage measuring



Surface in Ha



Conductors



Suitable for longer fences



Suitable for fences with a maximum fence length of 200 mtr



Cross, vertical connection that connects the horizontal connectors



Indication resistance in Ohm per (Kilo)Meter. A lower number means less resistance and therefore more current/volts over a longer distance.

The further the arrow points to red, the higher the resistance of this product.



Number of connectors in or round More and thicker connectors means a better current transit The material can exist out of INOX or copper (Cu).



Breaking strength (pull weight) Indication of the breakpoint in Kilogram.

Resistance

The resistance is being measured in Ohm (R). The resistance slows the energy down. R=U/I. No resistance means short circuit, 1.000.000 $\boldsymbol{\Omega}$ means a good insulation. An animal or a person has an average resistance of about 500 R. For this reason the power and the impulse energy with this resistance are the relevant values to compare electric fencers. Also conductors like wire, tape and rope have a resistance. The resistance of the various conductors is different. Aluminum wire has a very low resistance and is therefore most suitable for very long fences.

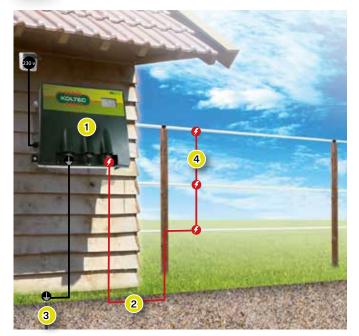
PE: Conductors constructed with Polyethyleen wires have a long endurance.

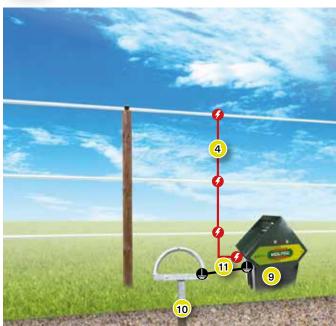
230 VOLT

Mains energisers 230 VOLT



Battery energisers 9-12 VOLT



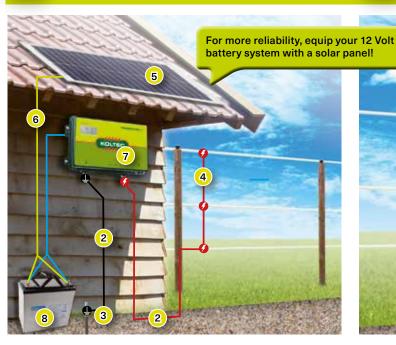


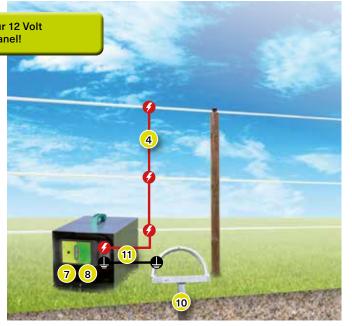


Battery ENERGISERS 12 VOLT



Battery ENERGISERS 12 VOLT



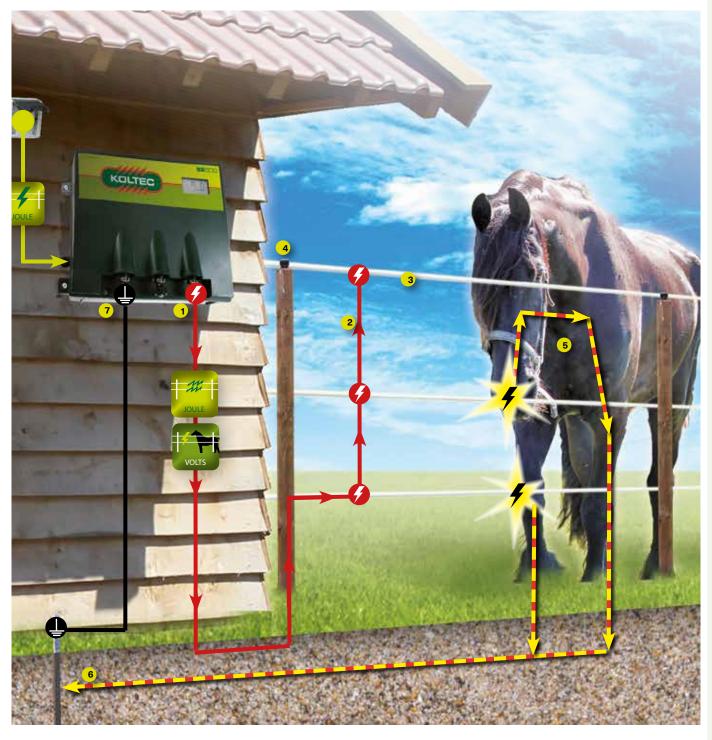


- 1. MAINS ENERGISER (See from page 18)
- 2. HIGHTENSION CABLE (See page 43)
- 3. EARTH STAKE (See page 47)
- 4. LINKING KIT (See page 72)
- 5. SOLAR PANEL (See page 34)
- 6. EXTENSION CABLE (See page 34)
- 7. WET CELL BATTERY ENERGISER (See page 26)
- 8. WET CELL BATTERY (See page 32)
- 9. BATTERY ENERGISER (See page 36)
- 10. MOBILE EARTH STAKE (See page 47)
- 11. CONNECTION KIT (See page 44)

Optional connection of lightning diverter and/or switch, see page 41.

KOLTEC TIP

If you have to connect your device to the grid by bridging a distance over 25 meter use the high voltage cable with 2.5 mm solid core.



An electric fence is simple, fast and cheap to build comparing to a mechanical fence. The electric pulse takes care that the animals stay away from the fence. Your fence hardly will be damaged and will last longer.

The shock from an electric fence system is achieved by making short-circuit. This goes as follows:

- **1** The energiser gives current pulses.
- 2 These impulses are fed through a connection cable to the fence.
- The fence consists of conducting materials, often steel, stainless steel or copper, sometimes incorporated in synthetic materials, like poly rope, poly tape and poly wire.
- **4** The insulators on the posts prevent the fence to connect with earth.
- **5** When an animal touches the fence, the current pulses go through the body to earth.
- 6 Through the ground (earth) the current pulses go to the earthpin(s).
- 7 The earthpin is connected with the earth output of the fencer, with which the circuit is closed.

For the connection of your energiser see page 10 & 42

For the importance of earthing see page 46



SE340

MAINS ENERGISER

The SE340 isprovided with a display and alarm. With the display all the necessary information about the fence is directly visible. If there really is a problem and the tension drops below the 2.000 Volt, the alarm will go off. This is a sign to check the fence immediately

LOWERED IN PRICE + FREE BOUNDARY BLADE, worth € 29,95



SE425MAINS ENERGISER

The SE425 is a strong device, without frills, comparable to the SE500. Because of the wide energy pulse the shock effect is very good. Extremely suitable for animals which are difficult to keep such as sheep and Shetland ponies in a large meadow. Ideal fencer for users wanting a strong, affordable device, but don't care about digital read out or alarm.

+ NOW WITH FREE DIGITAL VOLTMETER!



HB15BATTERY POWERED ENERGISER

The HB15 is very suitable for mobile applications and short fences because of its compactness. Only small types of batteries will fit. By means of the battery-leads 152-80017 this fencer can also be connected with an external 12 Volt wet cell battery. It has a peak voltage of 9.200 Volt and stored energy of 0,20 Joule. The consumption is Approx. 20 mA.

+ NOW WITH FREE BATTERY 9 VOLT - 570 Wh, worth € 29,95



EC20 BATTERY POWERED ENERGISER

The EC20 is an all-round fencer deduced from the EC25. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries. With a peak voltage of 9.900 Volt and stored energy of 0,30 Joule this is a powerful fencer. The consumption is 30 mA.



EC25 BATTERY POWERED ENERGISER

This range's top model is supplied with a day-night automatic. This saves much energy so that the battery lasts longer. It is suitable for all kinds of animals and types of fences. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries and DC adapters with an output of 9-12 Volt. With a peak voltage of 9.900 Volt and stored energy of 0,35 Joule this is a very powerful fencer. Yet the consumption is not more than 35 mA.

POCKET KNIFE - FENCE TESTER

BOUNDARY BLADE pocket knife, fence tester and tool in one.

1

Check your fences safe, quick and easy with the Boundary Blade®. The bright LED-indicators are easy to see under the most difficult circumstances and designed to fit comfortably in your hand. A sharp and solid knife comes in handy everywhere. Just tighten a screw? With the Boundary Blade no problem.

Boundary Blade® is an indispensable tool for in your pocket, trusted by farmers all over the world. "Walk into the field with confidence"





IDEAL POCKET KNIFE

With the practical pocket knife with both a smooth and partly serrated surface. Ideal for various situations where a blade is used.



FENCE TESTER

Always on hand to test the actual voltage on the electric fence. A five-stage indication by means of 5 bright indicator LEDs.

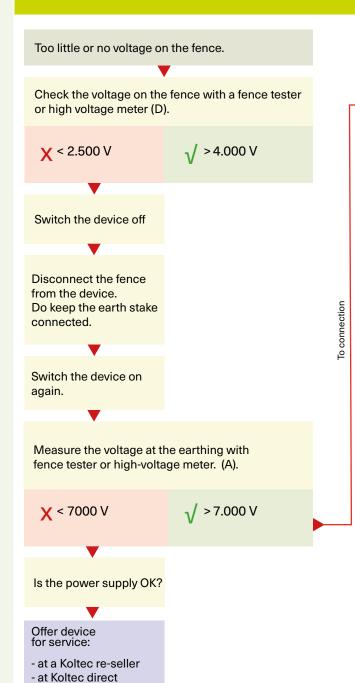


WRENCH

Inside the high-quality blade there is a handy recess for different bolt sizes up to M6

Photo	Art. nr.	Description	PU	€ price/PU
1	162-85487	Pocket knife - tester Boundary Blade	1	

FAULT ANALYSIS ELECTRIC FENCE



Switch the device off again.
Reconnect the fence to the device.

Disconnect the connection cable from the device to the fence, at the fence.

Switch the device on again.

Measure the voltage at the end of the connecting cable (B)

X < 7000 V

Connection in order.

Connection cable is faulty.

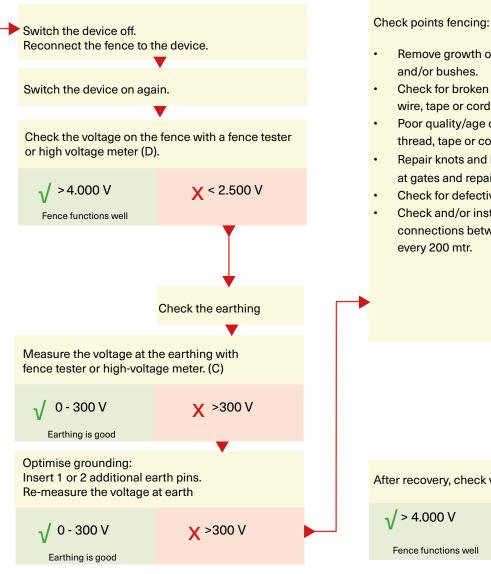
Repair / replace with by high voltage cable

See page 43



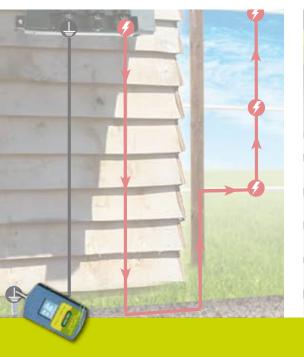


C



Remove growth of grass, weeds and/or bushes. Check for broken conductors in wire, tape or cord. Poor quality/age of the thread, tape or cord. Repair knots and bad connections at gates and repaired parts. Check for defective insulators. Check and/or install vertical connections between the wire, tape or cord every 200 mtr. This run should be repeated until the fence is good. After recovery, check voltage on fence again. (D) **X** < 2.500 V 1/ > 4.000 V

Once the earthing has been checked, the fence should be checked again.(D).





DEVICE SPECIFICATIONS

		pov	ver sou	ırce		· I		energy	/		.	Fence	elengtl
	5 YEARS/JAHRE WARRANTI/GARANTIE	230 VOLT	+ -	9-12 VOLT DC	SOLAR	- Watt	VOLTS	VOLTS	JOULE	Max. JOULE	CEE Km		
		Mains power Volt	Battery Voltage	Dry battey Voltage	Solar pnael	Energy consumption mA / W	Peak power	Power @ 500 Ohm	Stored energy	Impuls energy	CEE length	Fence length, clean	Fence length with growth
	Mains energiz	ers											
	SE500 SE440 SE340 SE425 CSIKOS DIGITAL	230 230 230 230 230				11 10 6 10	9.000 9.000 9.200 8.800	4.600 4.000 3.500 4.000	10 6 5 10	6,2 4,4 3,4 5,4 3,0	300 200 150 300	25 20 15 25	8 5 4 7 3,0
1000	CSIKOS XP CSIKOS	230 230				3 1	8.800 6.000	4.100 2.750	5 2,8	2,5	150 100	12 3	2,5 1,0
	ES10 ES-5	230 230				1,3 0,5	11.200 10.900	4.200 3.500	1,3 0,7	1,0 0,5	50 27	2	0,8 0,4
	MINIGARD XXP MINIGARD XP	230 230				6 2	7.500 5.700	4.500 2.900	6 2	3			
1 1	MINIGARD HOBBY	230				0,3	7.000	1.000	0,2	0,15			
	HORSETRAINER 12 Volt power	230 ed ene	ergizers			1,9	8.000	0.3-4.0	1,5	0,02-1,0			
	POWERGARD XP POWERGARD PG200	230 230 230	12 12 12		20 W 10 W 20 W	140-190 70-120 180	8.800 8.500 10.000	5.800 3.200 5.600	4,85 2,0 2,75	3,1 1,5 2,0	120 85 55	20 5 6	5,0 1,5 2
	PG100 PG50 COW TRAINER	230	12 12 12/24		10 W	120 50	9.400 8.500 8.600	5.000 2.800 300	1,50 0,75 0,04	1,0 0,5 0,02	45 30	1	0,8
	Solar energize	rs	12/21				0.000		0,01	0,02			
	HS75 (5+10Watt) MS50 MS25 MS15		12/24 12 12 12		10 W 10 W 5 W 2,5 W	40 50 40 30	8.200 11.000 9.000 7.500	2.500 3.600 3.100 2.500	0,75 0,65 0,33 0,18	0,15-0,5 0,50 0,25 0,15	25 18,0 8,5 3,7	1,2 1,6 0,8 0,4	0,6 0,8 0,4 0,2
	Dry battery (96 EC25 EC20	&12 V) Opt.	power	ed ene 9-12 9-12	ergizers	35 30	9.900 9.900	2.500 2.300	0,35	0,30 0,25	18 13	0,8	0,2 0,2
	HB15 EB15 HB10 ST	Opt.		9 - 12 9 - 12 9 - 12		20 20 15	9.200 9.200 8.700 7.000	2.000 2.000 1.700 500	0,20 0,20 0,15 0,15	0,15 0,15 0,10 0,10	8 8 6 5	0,4 0,4 0,3 0,3	-

DEVICE SPECIFICATIONS

h					additio	onal fui	nctions	3					inclu	uding
	DIGITAL DISPLAY	< 2.000 VOLT	3 th		BOOSTER		SAVER	CHECK		HIGH / LOW	HIGH/LOW	(CONNECTION SET	
Ha (acres * 2.5)	Digital display	Alarm	Third terminal, half power	Ligthning protector	Growth booster	Growth indicator	Battery saver	Battery check / indicator	Charge indicator	Day / night automatic	High / Iow switch	Om / off switch	Connection kit	Warning sign
40 25 18 32 17 12 8 4 2	•	•	•	•							•			
14 6 8 4 2 3 4 2 1	•			•	•	•	•	•	•	•		•	•	•
3 2 1 1 0,5 0,5										•	•	•	•	•

SE SERIES

The SE-series consists of devices for professional fences on mains power. These fencers are very effective because of the wide pulse. By this the given energy is very well transmitted. This quality makes the series extremely suitable for difficult circumstances.

The SE-series is provided with an extra terminal for connecting a small paddock or second wire on half power for optimal functioning with dry or frozen soils. The devices are economical in use and have a solid, splash proof housing.

- + Digital notifications of the tension on your fence
- + Alarm when the power drops below 2.000 Volt
- + Wide pulse width, for an optimal shock effect
- + Destroys weeds/growths
- + 3 terminal for connecting small paddocks or to optimize the fence under dry and frozen circumstances.













1. SE500

The SE500 is provided with a display and alarm. With the display all the necessary information about the fence is directly visible. If there really is a problem and the tension drops below the 2.000 Volt, the alarm will go off. This is a sign to check the fence immediately











2 8544

The SE440 is provided with a display and alarm. With the display all the necessary information about the fence is directly visible. If there really is a problem and the tension drops below the 2.000 Volt, the alarm will go off. This is a sign to check the fence immediately



3. SE340.

The SE340 isprovided with a display and alarm. With the display all the necessary information about the fence is directly visible. If there really is a problem and the tension drops below the 2.000 Volt, the alarm will go off. This is a sign to check the fence immediately

LOWERED IN PRICE + FREE BOUNDARY BLADE, worth € 29,95



4 SF425

The SE425 is a strong device, without frills, comparable to the SE500. Because of the wide energy pulse the shock effect is very good. Extremely suitable for animals which are difficult to keep such as sheep and Shetland ponies in a large meadow. Ideal fencer for users wanting a strong, affordable device, but don't care about digital read out or alarm.

+ WITH FREE DIGITAL VOLTMETER! worth € 49,95



WARRANTY/GARANTIE	230 VOLT	Watt	VOLTS	VOLTS	JOULE	JOULE	CEE Km	Кт	Кт	На
SE500	230	11	10.000	4.600	10	6,2	300	25	8	40
SE440	230	10	9.000	4.000	6	4,4	200	20	5	25
SE340	230	6	9.000	3.500	5	3,4	150	15	4	18
SE425	230	10	9.200	4.000	10	5,4	300	25	7	32

Photo	Art. nr.	Description	PU € price	/PU
1	161-83040	Energiser KOLTEC SE500 mains	1	
2	161-83030	Energiser KOLTEC SE440 mains	1	
3	161-83020	Energiser KOLTEC SE340 mains, incl. Boudary Blade	1	
4	161-82651	Energiser KOLTEC SE425 mains incl. digital voltmeter	1	

PU=Packing Unit Price incl. VAT

CSIKOS SERIES

KOLTEC has developed mains operating fencers, specially for horses

which meet the needs for animal friendliness and safety.

Horses are sensitive animals, which are being kept behind clearly visible conductors such as tape and rope. Horses can detect quickly if the conductor is under tension or not. Therefore you need a reliable KOLTEC fencer, to keep your animals at all times in their paddocks.

CSIKOSDIGITAL KOLTEC

Digital Display

What is the function of it?

- It gives you information about your fence situation in a split second.
- Displays the real tension on your fence.

1. CSIKOS DIGITAL

A powerful fencer with a peak voltage of 8.800 Volt and a stored energy of 6 Joules.

Is suitable for all kinds of animals and has a digital display to monitor proper operation of the fencer.





2. CSIKOS XP

Csikos XP, the horse keeper pre-eminently. It is suitable for long fencing.

With a stored energy of 5 Joule and a peak voltage of 8.800 Volt strong and sufficiently energetic to keep difficult fences under tension.



3. CSIKOS

Mains operating fencer especially developed for small to medium-sized horse meadows or paddocks. The fencer supplies, with a stored energy of 2,8 Joule, a peak voltage of 6.000 Volt.



Maximum fence length in Km See pag. 8 & 9

VEARS/JANGE WARRANTY/GARANTE	230 VOLT	- Watt	VOLTS	VOLTS	JOULE	Max. JOULE	CEE Km	Km	Km	На
CSIKOS DIGITAL	230	6	8.800	4.100	6	3,0	150	15	3,0	17
CSIKOS XP	230	3	8.800	4.100	5	2,5	150	12	2,5	12
CSIKOS	230	1	6.000	2.750	2,8	2,0	100	3	1,0	8
ES10	230	1,3	11.200	4.200	1,3	1,0	50	2	0,8	4
ES-5	230	0,5	10.900	3.500	0,7	0,5	27	1	0,4	2

Photo	Art. nr.	Description	PU	€ price/PU
1	161-82200	Energiser KOLTEC Csikos Digital mains	1	
2	161-82296	Energiser KOLTEC Csikos XP mains	1	
3	161-82310	Energiser KOLTEC Csikos mains	1	
4	161-82140	Energiser KOLTEC ES10 1,0J mains	1	
5	161-82105	Energiser KOLTEC ES-5 mains	1	

PU=Packing Unit Price incl. VAT

HORSE TRAINER

TRAINE 1 KOLTEC

"To optimize the functioning of an exerciser, it is recommended to use an electric fencer."

HORSE TRAINER

This device is specially developed for horse exercisers. The tension and with that the energy, can be adjusted continuously. The device is adjustable to the sensitivity of the horses. The tension is adjustable from 300 Volt up to 8,000 Volt.

The impulse energy from 0.02 up to 1.0 Joule (at 500 Ohm). The digital display is showing the adjusted tension.



HB15 & ES10

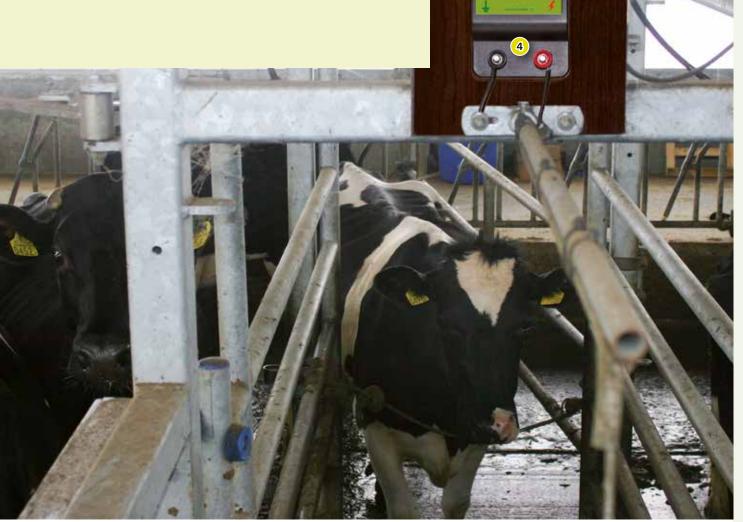
EXERCISER

For the proper function of a treadmill the availability of an energiser is recommended. If the tension does not need to be adapted to the different animals then the ES10 (3) mains power device is a widely used device. Some mills have a construction which does not allow the mounting of an energiser on the outside in a permanent exhibition. In that situation a battery device like the HB15 (2) can solve this. It works with the mill and provides the round-up fences with tension.



Many modern livestock farms have in their stable round-up gates and selection boxes. To work efficiently, the cows sometimes need to be stimulated to keep the tempo and go in the right direction The COW TRAINER of KOLTEC assists in this. The device is powered with a 12 or 24-Volt DC power supply system.

Through years of experience the energy delivery and voltage are adjusted so that the cows have no "trauma" experience.





















HORSE TRAINER	230			1,9 W	8.000	0.3-4.0 kV	1,5	0,02-1,0
ES10	230			0,6 W	8.300	3.000	1,0	0,6
HB15			9-12	20 mA	9.200	2.000	0,20	0,15
COW TRAINER		12-24		10 mA	8.600	300	0,04	0,02

Photo	Art. nr.	Description	PU	€ price/PU
1	161-82150	Energiser KOLTEC Horse Trainer mains	1	
2	160-81010	Energiser KOLTEC HB15 0,15 J 9 / 12 Volt battery device	1	
3	161-82140	Energiser KOLTEC ES10 1,0J mains	1	
4	161-82891	Energiser KOLTEC Cow Trainer on 24 Volt with 5 mtr lead	1	
	161-82892	Energiser KOLTEC Cow Trainer on 12 Volt with 5 mtr lead	1	



1. MINIGARD XXP

The MiniGard XXP is a very powerful energiser that tolerates some growth of weeds and/or grass, without a drastic decrease of the tension on the fence. This energiser is highly recommendable around ponds with lots of plants on the banks or gardens with lots of plants on the fence.

Where plants touch the wire, they will die. Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful energiser can't get through.



















2. MINIGARD XP

The MiniGard XP is 5x more powerful than the MiniGard II. It tolerates a little growth of weeds and/or grass. The energiser will hold the tension at light growth on a proper level. Where plants touches the wire, they will be scorched.

















3. MINIGARD II HOBBY

A small energiser, very suitable for short distance fences. Does not tolerate growth of weeds and/or grass. The MiniGard can be installed in combination with various accessories to make a fence to size.













Photo	Art. nr.	Description	PU	€ price/PU
1	161-82529	Energiser KOLTEC MiniGard XXP mains	1	
2	161-82524	Energiser KOLTEC MiniGard XP mains, ideal for large gardens	1	
3	161-82520	Energiser KOLTEC MiniGard II Hobby mains, for wooden fences and aviaries	1	

1. MINIGARD XXP POND KIT

This kit is designed especially to fence ponds. The MiniGard XXP is an energiser that tolerates some

growth of pond plants, without losing the tension on the fence.

This kit contains a MiniGard XXP, a connection cable set, 100 meter special turbo wire and two plastic wire strainers.

Apart from this kit you need garden posts, with, depending on which kind of post, matching insulators.

When the MiniGard XXP is installed at a longer distance from the pond, we recommend the use of high voltage cable for the connection. With a digital display which gives you information about the fence.

Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful fencer can't get through.

2. MINIGARD II AVIARY KIT

In this kit we added to the MiniGard II 25 little ring insulators, a plastic wire strainer, 100 meter wire and a connecting cable kit.

This set is available for wood or metal constructions.



3 MINIGARD XP GARDEN KIT

3

In this kit there is a more powerful version of the energiser.

This fence energiser is suitable for longer fences and is less sensitive for eventual light growth of weeds or plants. Besides the fencer we will deliver a basic kit with which a fence can be build.

All you need to buy further are garden posts or insulator supports for the fence and an earthpin.

The kit contains a MiniGard XP, 2 wire strainers, connecting cable set and 250 meter wire.

KOLTEC



4. MINIGARD GARDEN FENCE KIT

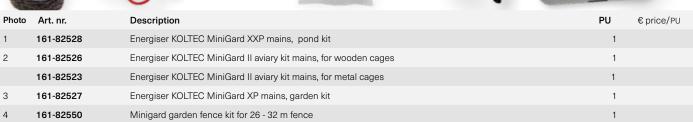
This set is mainly intended for keeping cats out of your garden. But vice versa, it also keeps your own cat in the garden.

This complete kit for fences consists of the MiniGard II Hobby mains unit supplemented with 16 insulator supports with 2 insulators each, 4 small ring insulators, 4 plastic wire tensioners, 100 metres of fence wire, 5 metres of high-tension cable, 4 earth stake and a tester.

The standard materials supplied are sufficient for approx. 26 - 32 mtr of fence.

Depending on the length of the fence, you can buy additional individual components such as supports, ring insulators or wire separately.





PU=Packing Unit Price incl. VAT

0 mm 250 mtr





















1. POWERGARD XP

A powerful and intelligent fence energiser. It increases fully automatic the voltage when the tension on the wire lowers below 4.000 Volt by touching or growth of plants. It switches back to its normal economical operation, as soon as the load is normal. Growth of grass or weeds will be scorched, while the energy consumption stays low. With the **built-in battery protector** your expensive battery is well protected.

With a tension of 5.800 Volt and 3,1 Joule at 500 Ohm a very powerful energiser. The display shows you alternating the tension on your application and the battery tension.



2. POWERGARD

A handy and powerful fence energiser for smaller area's, with more difficult animals to keep like sheep and shetland pony's. It increases fully automatic the voltage when the tension on the wire lowers below 3.000 Volt by touching or growth of plants. It switches back to its normal economical operation, as soon as the load is normal.

Growth of grass or weeds will be scorched, while the energy consumption stays low. The built-in battery protector protects your expensive battery against discharge below the critical level.





















12 Volt battery

Optional:

- mains operating
- solar panel
- **Battery protector**
- **Energy saver**
- **Charge indicator** external power sources
- Load indication for short cuts / growth
- **Power booster**





POWERGARD XP

POWERGARD



12



140-190

70-120



8.800

8.500



5.800

3.200







1,5



10 W



85



5



1,5

H	•	
1	4	П

Photo	Art. nr.	Description	PU	€ price/PU
1	160-81087	Energiser KOLTEC Powergard XP 3,2 J 12 Volt battery device, incl. mains adapter	1	
2	160-81037	Energiser KOLTEC Powergard 2,0 Joule, incl. mains adapter	1	
3	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
4	135-39993	Adapter DC 12 Volt with con. PG series	1	
5	162-60004	Bracket for mounting Powergard XP	1	
6	152-80003	Connection cable for wet cell batteries, replacement for Powergard, PG-serie and solar panels	1	
7	162-85508	Extension cable for solar panels, 5 m incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 m incl. connectors	1	

2,0

PU=Packing Unit Price incl. VAT

PG SERIES

The PG wet cell battery powered devices are combi-fencers that function on 12 Volt wet cell batteries as well as mainstream. Small, handy devices that can be adjusted to a wall or post in a simple way.

The control light informs you about the condition of the battery. When it flashes green everything is all right, when it flashes red the battery needs to be recharged.

The PG series is also equipped with a battery protector, which prevents the battery to become discharged below the critical level of 10,5 Volt.

This prevents damage and prolongs the life of the battery. To keep the battery charged without looking after it you can add a solar panel.

Included is now a 12 Volt DC adapter to make the PG devices function on mainstream also. This adapter can be easily switched with the battery cable.





















1 100 01007 Energiasy VOLTEO DC000 12 Valk hottony daylog	
1 160-81067 Energiser KOLTEC PG200 12 Volt battery device 1	
2 160-81065 Energiser KOLTEC PG100 12 Volt battery device 1	
3 160-81081 Energiser KOLTEC PG50 12 Volt battery device 1	
4 135-39993 Adapter DC 12 Volt with con. PG series 1	
5 162-85508 Extension cable for solar panels, 5 m incl. connectors	
162-85509 Extension cable for solar panels, 10 m incl. connectors 1	
6 152-80003 Battery connection lead, exchange for battery devices & SP 1	

CARRY CASE

A sturdy case to mount a Powergard XP, Powergard or PG fencer in combination with a wet cell battery. Easy to carry due to 2 carry handles. The case is made of sendzimir plate material, which has a very good resistance against corrosion.

With the extra available accessory it is very easy to mount a 10 or 20 Watt solar panel on top of the case. With this you create a complete and handy solar unit which is very easy to transport

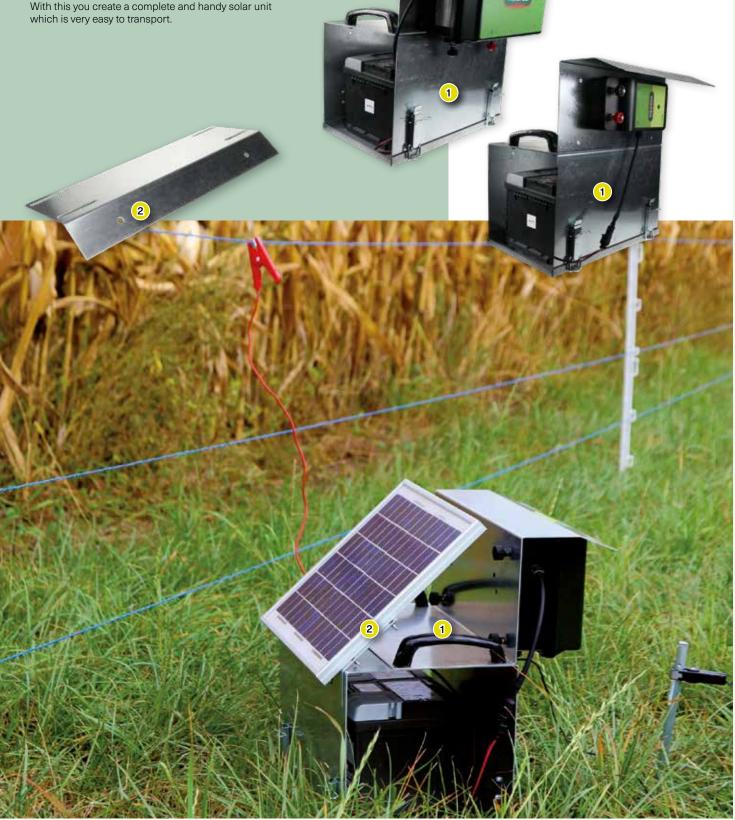


Photo	Art. nr.	Description	PU	€ price/PU
1	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
2	162-60019	Solar bracket for carry case	1	

HS 75 HYBRID SOLAR

















The HS75 is a multi-functional wet cell battery fencer. Because of the solar panel you do not need to look after the fencer. The also supplied 12 V- 12 AH battery provides the energy supply during the night and dark days.

Ideal for temporarily, mobile utilization where a fairly powerful device is wanted. With the built-in charge regulator and battery protector the battery is protected against overloading and discharging. With a peak voltage of 8.200 Volt and a stored energy of 0,75 Joule and 2.500 Volt with max 0,5 Joule at 500 Ohm a powerful fencer for medium-sized meadows. Delivered with 12 Volt battery, 5 or 10 Watt solar panel, 24 Volt DC adapter, a high quality connection set, warn sign and mounting base.





HS75 10 WATT SOLARSET

If the HS75 with solar panel is used the whole year around, it is to be recommended to use a larger solar panel. In the winter months it is so dark that a 5 Watt solar panel does not have enough capacity to keep the battery charged. If interim recharging with the adapter is not wanted, than the HS75 with a 10 Watt solar panel is highly recommended.

























12 - 24

40

8.200

2.500

0,75

0,15-0,5







Photo	Art. nr.	Description	PU	€ price/PU
1	160-81310	Solar kit KOLTEC HS75 with 10 Watt solar panel	1	
2	160-81305	Solar kit KOLTEC HS75 with 5 Watt solar panel	1	
3	162-85508	Extension cable for solar panels, 5 m incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 m incl. connectors	1	
4	162-80197	Earth stake, 75 cm, for mobile devices	1	
5	163-45530	Exchange AGM battery 12 Volt 12 Ah, for HS75 & MS-serie	1	

MS SERIE

Three compact solar fencers, very usable for mobile applications. With an integrated solar panel that keeps the wet-cell battery charged during the meadow season.

A solid housing that can be placed on the ground, but has also possibilities to hang it on a post or wall. With 0,18, 0,33 and 0,65 Joule loading energy and a relatively high tension, suitable for short and middle long fences.

For the winter months a charger is supplied also to charge the wet-cell battery extra in this period.



- Wet-cell battery 12 volt 7 Ah or 12 Ah
- Wet-cell battery charger
- Connection set
- Warning sign















Photo	Art. nr.	Description	PU	€ price/PU
1	160-81450	MS50 mobile solar fencer	1	
2	160-81425	MS25 mobile solar fencer	1	
3	160-81415	MS15 mobile solar fencer	1	
4	162-60020	Support bracket MS-Serie	1	

PU=Packing Unit Price incl. VAT

BATTERIES

1 - 3 TRACTION-BATTERY

The traction battery is also called deep-cycle battery or light battery. The battery is made to deliver long-term power.

A traction battery can be discharged up to 80% without damage. How many times a battery can be charged and discharged is called the "cyclic power" of a battery. This is with a traction battery approx. 4 times higher than with a start battery.

A battery is empty when operating (in charge) it cannot deliver more than 80% (9.6 volts) of

the specified voltage (12 Volt).

Temperature

The capacity of a wet cell battery decreases under influence of temperature. By -10 C this is 25% lower and there is also needed a higher charge tension to get the wet cell battery optimal loaded.

4 - 5 CAR-BATTERY

A start-battery is meant to start a car or tractor. The battery is made to deliver shortly a high Amperage (current). This type of accumulators is less suitable for a prolonged constant current supply, the battery will be discharged too far.

By strong discharge the capacity strongly goes backwards due to sulfation. Once this happens the battery is very quickly ruined! For that reason **KOLTEC** has equipped all wet cell battery powered energisers with a protection against discharging below the critical level. It is recommended that a start battery does not go beyond 20% discharge.

6. SONEIL BATTERY CHARGER

7. CTEK BATTERY CHARGER

The CTEK wet-cell battery charger is small, but extremely efficient. The charger will load up to 5,0 Ampère per hour. Adjustable for small leadgel wet-cell batteries as for the heavy start wet-cell batteries. Re-conditioning is an option for having to deeply discharged wet-cell batteries somewhat function again.

8. BATTERY PINCE, PLASTIC













Photo	Art. nr.	Description	PU	€ price/PU
1	163-45530	Exchange AGM battery 12 Volt 12 Ah, for HS75 & MS-serie, 3,8 Kg	1	
2	163-45531	Cycle battery 12 Volt - 55 Ah, 197*165*170 mm / 14,2 kg	1	
3	163-45547	Traction battery, double pool, 12Volt-110 Ah, 330*172*238 mm / 25,4 Kg	1	
4	163-45548	AGM battery, 12 Volt - 110 Ah, 329*172*215 mm / 27 Kg	1	
5	163-45539	Battery, maintenance free, 12 Volt - 44 Ah, 210*175*190 mm/11,9 kg	1	
6	163-45540	Battery, maintenance free 12 Volt - 74 Ah, 278*175*190 mm/16,9 kg	1	
7	162-85530	Wet cell battery charger, 4,0 Amp.	1	
8	162-85520	Cetec MXS 5.0 battery charger, max. 5.0 A charge current	1	
9	135-45051	Battery pince, plastic, red	1	
	135-45052	Battery pince, plastic, black	1	
	135-45053	Battery pince, plastic, green	1	



SOLAR PANELS

Solar energy as power source for your fence.

There are various reasons for combining a battery operating fencer with a solar panel:

- · The section is far from home
- There is no electric power in the area
- · You are not able to check the fence on a regular basis
- It is not possible for you to regularly change the battery for reloading this at home

A battery operating electric fencer combined with a solar panel can function during the whole season maintenance free, without looking after it. Also in Northern-Europe the sun supplies enough energy/light in order to charge up the battery sufficiently during daylight. Therefore the battery continuously supplies enough electric current in order to keep your fence under power day and night.

All KOLTEC car battery powered fencers can be connected to a KOLTEC solar panel.









Photo	Art. nr.	Description	PU	€ price/PU
1	162-85513	Solar panel 45 Watt incl. charge regulator, various applications, 69*55 cm 4.6 kg	1	
2	162-85514	Solar panel 30 Watt incl. charge regulator, various applications, 56 * 52,5 cm 3.7 kg	1	
3	162-85515	Solar panel 20 Watt incl. charge regulator for Powergard XP, 48 * 37 cm 2.6 kg	1	
4	162-85516	Solar panel 10 Watt incl. charge regulator for Powergard, 35 * 24 cm 1.9 kg	1	
	162-85518	Solar panel 10 Watt without regulator, specially for HS75, 35 * 24 cm 1.9 kg	1	
5	162-85517	Solar panel 5 Watt without regulator, for battery devices and HS75, 32 * 20,5 cm 1.0 kg	1	
6	162-85508	Extension cable for solar panels, 5 m incl. connectors	1	
	162-85509	Extension cable for solar panels, 10 m incl. connectors	1	
7	162-60005	Frame for mounting 5, 10 & 20 Watt solar panels	1	
8	152-80003	Battery connection lead, exchange for battery devices & SP	1	

1. MOUNTING KIT

This kit with two brackets is suitable for larger solar panels. Ideal to mount the 30 & 45 Watt panels to a wall or roof.

2. MOUNTING FRAME

Separate frame on which the 5, 10 and 20 Watt offered solar panels can be mounted. This frame fits on the mounting post and mounting bracket.

3. MOUNTING POST

Special post for a stable line up of a battery fencer in combination with a battery and/or solar panel.

4. ALUMINIUM POLE

Solar panels sometimes have far better use when they are placed a little higher.

This is also a limited form of theft prevention. The base pole is 2 meters high and equipped with clamps to mount on a wall or solid pole. The installation frame by KOLTEC fits on this pole. The extension set consists of 1 meter with connection pieces. The maximum total height that is recommended is 3 meters

5. MOUNTING BRACKET

Special bracket for mounting solar panels on a post or wall.

7. PLACING SET

A very handy portable metal box to carry a wet cell battery with or without a Powergard energiser.

Can be mounted to the mounting post.

8. THEFT PREVENTION CASE

The theft prevention case is build in a way that it can be electrified by the fencer. The case is mounted on top of a heavy duty earth rod of 120 cm. It is locked tot his post from the inside with a heavy M10 bold. The locking can be done with a padlock (Not supplied) In the bottem a hole is made to lead a high tension cable to the outside for connecting the fence. Dimensions of the case are W50*L50*H30 cm.

Inside the case there is space for a 12 Volt battery with the maximum dimensions of max. W25*H28*L48 cm.



MOUNTING MATERIAL







Art. nr.	Description	PU	€ price/PU
162-85511	Mounting kit for 30 & 45 Watt panels	1	
162-60005	Frame for mounting 5, 10 & 20 Watt solar panels	1	
162-60003	Post for mounting Powergard and Powergard XP	1	
162-60017	Post for solar panels, 2 m, with mounting parts	1	
162-60018	Extension kit 1 m for post solar panel	1	
162-60006	Bracket for mounting 5, 10 & 20 Watt solar panels on a wall	1	
162-60019	Solar bracket for carry case	1	
162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
162-60016	Box for theft prevention, electrifiable case	1	
	162-85511 162-60005 162-60003 162-60017 162-60018 162-60006 162-60019 162-60015	162-85511Mounting kit for 30 & 45 Watt panels162-60005Frame for mounting 5, 10 & 20 Watt solar panels162-60003Post for mounting Powergard and Powergard XP162-60017Post for solar panels, 2 m, with mounting parts162-60018Extension kit 1 m for post solar panel162-60006Bracket for mounting 5, 10 & 20 Watt solar panels on a wall162-60019Solar bracket for carry case162-60015Box to carry a wet cell battery and/or Powergard or PG energiser	162-85511 Mounting kit for 30 & 45 Watt panels 1 162-60005 Frame for mounting 5, 10 & 20 Watt solar panels 1 162-60003 Post for mounting Powergard AP 1 162-60017 Post for solar panels, 2 m, with mounting parts 1 162-60018 Extension kit 1 m for post solar panel 1 162-60006 Bracket for mounting 5, 10 & 20 Watt solar panels on a wall 1 162-60019 Solar bracket for carry case 1 162-60015 Box to carry a wet cell battery and/or Powergard or PG energiser 1

EC & HB SERIES

The EC25, EC20, EB15 and HB15 battery powered energisers are technically very solidly built, stripped of all its frills, and very popular. The recognizable housing, in becoming a stylish camouflage is hardly noticed in the field. Almost every available power source can be connected to these apparatus.

- Energy consumption is very low
- Reliable electronic
- Solid housing

These KOLTEC dry cell Battery energisers are delivered inclusive a high quality connection set, warn sign and mounting base





1. EC25

This range's top model is supplied with a day-night automatic. This saves much energy so that the battery lasts longer. It is suitable for all kinds of animals and types of fences. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries and DC adapters with an output of 9-12 Volt. With a peak voltage of 9.900 Volt and stored energy of 0,35 Joule this is a very powerful fencer. Yet the consumption is not more than 35 mA.

*WITH FREE FENCE TESTER, worth € 19,95









2. EC20

The EC20 is an all-round fencer deduced from the EC25. Suitable for all 9 Volt dry cell batteries. Also suitable for 12 Volt wet cell batteries. With a peak voltage of 9.900 Volt and stored energy of 0,30 Joule this is a powerful fencer. The consumption is 30 mA.

* WITH FREE FENCE TESTER, worth € 19,95







1. HB15

The HB15 is very suitable for mobile applications and short fences because of its compactness. Only small types of batteries will fit. By means of the battery-leads 152-80017 this fencer can also be connected with an external 12 Volt wet cell battery.

It has a peak voltage of 9.200 Volt and stored energy of 0,20 Joule. The consumption is Approx. 20 mA

* NOW WITH FREE BATTERY 9 V - 570 Wh / 75 Ah, worth € 29,95





Photo	Art. nr.	Description	PU	€ price/PU
1	160-81025	Energiser KOLTEC EC25 0,25 J 9 / 12 Volt battery device	1	
2	160-81023	Energiser KOLTEC EC20 0,2 J 9 / 12 Volt battery device	1	
3	160-81010	Energiser KOLTEC HB15 0,15 J 9 / 12 Volt battery device	1	

1. HB10

The HB10 is the step-in dry battery fencer. It is very suitable for mobile applications and short fences because of its compactness. Only small types of batteries will fit. By means of the battery-leads 152-80017 this fencer can also be connected with an external 12 Volt wet cell battery.

It has a peak voltage of 8.700 Volt and stored energy of 0,15 Joule. The consumption is Approx. 15 mA







2. EB15

The EB15 is a small all-round fencer, very suitable for mobile use because of its

Only small types of batteries will fit. Also suitable for 12 Volt wet cell batteries. To supply it via mains use a DC adapter with an output of 9 - 12 Volt. With a peak voltage of 9.200 Volt and stored energy of 0,20 Joule this is a fine fencer. The consumption is 20mA.









One of the worlds most sold battery fence controller is still in production. Extremely solid mechanical working device. It will last a long time proving itself to be the most reliable fencer on the market. Only suitable for short fences (2,5 acre / 1 Ha) without growth of weeds or grass. Powered by round battery which lasts one full grazing season.

*Battery recommendation: 6 Volt - 510 Wh (100 Ah) alkaline.

Not adapted for 7,5 Volt round alkaline batteries!!





Usage periode max. 236 days with advised battery*

*All usage periods in combination

with different types of batteries see page 38





















EC25	9 - 12	35	9.900	2.500	0,35	0,30	18	0,8	0,2	3
EC20	9 - 12	30	9.900	2.300	0,30	0,25	13	0,6	0,2	2
HB15	9 - 12	20	9.200	2.000	0,20	0,15	8	0,4	-	1
EB15	9 - 12	20	9.200	2.000	0,20	0,15	8	0,4	-	1
HB10	9 - 12	15	8.700	1.700	0,15	0,10	6	0,3	-	0,5

Photo	Art. nr.	Description	PU	€ price/PU
1	160-81006	Energiser KOLTEC HB10 9 / 12 Volt battery device	1	
2	160-81020	Energiser KOLTEC EB15 0,15 J 9 / 12 Volt battery device	1	
3	160-81000	Energiser KOLTEC ST (Mushroom type) 6 Volt battery device	1	
4	153-60502	Battery container ST	1	

PU=Packing Unit Price incl. VAT





EC2100



HB15/EB15

Consumption	in	mΑ

			Consumption in mA					15	18	20
Art.Nr	Туре	Price	Tension	Energy	Capacity	Weigth	Shape			
		Incl. VAT	Volt	Wh	Ah					
163-45505	Alkaline		9,0	380	55	1,35	Small	117	97	87
163-45522	Alkaline		9,0	570	75	1,82	Small	176	147	132
163-45515	Alkaline		9,0	540	65	1,75	Small	166	138	125
163-45524	Alkaline		9,0	900	120	2,27	Small	278	231	208
163-45527	Alkaline		9.0	1400	175	3,20	Large	432	x	х
163-45534	Alkaline		9,0	1250	160	2,67	Small	385	321	289
163-45532	Alkaline		9,0	1500	200	4,26	Large	463	386	×
163-45525	Alkaline		12,0	690	60	2,32	Small	х	133	119
163-45533	Alkaline		12,0	1380	120	4,45	Large	х	266	Х

In case of using a car battery, the following accessories are available:

Alkaline

163-45501

152-80017 Simple battery connection kit	х	Yes	Yes
162-60000 Battery connection kit with charge indication	X	Yes	Yes

100

1,70

Suitable for 12 Volt car battery

For the energy supply of fencers we use mains, car batteries, solar units or dry cell batteries. If there is no mains available, energy supply by a dry cell battery is common use. Low cost and easy to transport. There are two types of dry cell batteries, saline and alkaline batteries. Both are air-oxygen batteries, they need oxygen out of the air to maintain a chemical reaction to produce the energy.

6,0

510

DIFFERENCES BETWEEN ALKALINE AND SALINE

Both types are free of mercury and cadmium and therefore environmental friendly, if it is disposed after usage at a offical disposal point. It is not allowed to dispose the batteries with consumer- or company garbage.

ADVANTAGE OF ALKALINE BATTERIES

- The most important advantage is the output tension. Alkaline batteries give a stable tension during the usage period. The tension of saline batteries drops from 8,4 Volt to 5,5 Volt (picture below). With a decreasing battery tension -which is the case for all saline batteries-, the fencer will take up more electrical current to maintain the declared output energy and this will result in accelerated battery discharge.
- The cathode and anode in an alkaline battery are much more efficient. This results in less material for the same capacity compared to saline batteries. Alkaline batteries weight therefore ca half less then saline

batteries and are smaller. Due to this, less garbage is produced, also the transport costs are lower and the future disposal costs will be lower.

Round

No

Yes

Yes

- The electrolyte of alkaline batteries contains less water than saline batteries, due to that alkaline batteries function better at lower temperatures.
- · With a decreasing battery tension a fencer will use more energy to maintain the energy output. At a lower battery tension the internal resistance increases, due to that the energy uptake will increase accordingly. Alkaline batteries have due to an equal tension a lower energy use against saline batteries.

Advantages of alkaline against saline:

- 1. Voltage stays the same
- 2. Less raw material, less weight
- 3. Performs better at lower temperatures
- 4. Consumption is lower







EC20	EC25	ST	Other brands		
30	35	15	40	50	

PERSISTENCE IN DAYS

58	50	x	32	26
88	75	x	66	53
83	71	x	54	43
139	119	x	104	83
216	185	x	162	129
192	165	x	145	116
231	198	x	174	139
80	68	x	60	48
160	137	X	120	96
100				
X	Х	236	X	×

Yes	Yes	No	Yes	Yes
Vee	Vaa	Nie	Vaa	Vac

No

DIMENSIONS

Yes

Yes

Shape	Heigth in mm	Width in mm	Length in mm	
Round	180	Ø 180	na	
Small	102	102	165	
Large	158	127	189	

KOLTEC TIP

Choose a battery which fits to the desired life time. The higher the energy content / capacity, the lower the daily usage costs.

CAUTION!!:

Weeds / grass growth against the fence and conductors on the ground have a negative influence on the life time of the battery!

EXPLANATION ABOUT BATTERIES

BATTERY LIFE TIME

To give a better indication how long a battery works, Koltec changes the capacity indication from Ah into Wh. This stands for Watt hour. This is the energy of the battery, the higher the Wh, the higher the energy content, the longer a fencer works on this battery.

EXAMPLE CALCULATION:

Consumption of the fencer: 30 mA.

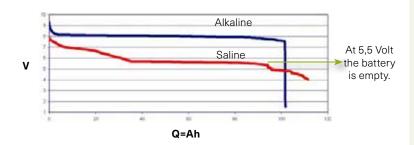
Average battery tension (alkaline): 8,5 Volt.

Energy consumption of the device: 30/1000 * 8,5 = 0,255 Wh

75 Ah Alkaline battery contains 570 Wh.

Usage time of the device with this battery: 570 / 0,255 = 2235 hour = 93 days.

TENSION CURVE OF ALKALINE AGAINST SALINE:



Batteries with the same capacity (100 Ah):

Battery	Weight	Energy (Wh)	Energy eff. Wh/Kg
Alkaline	2,3 kg	800	347
Saline	4,4 kg	600	136
	(,)		





1-2. MOUNTING FRAME EC20/EC25 OR ST

4. CONNECTION CABLE FOR BATTERIES

Handy frame in which the fencer is enclosed. The frame also functions as an earthpin. Placing the fencer from one section to another is made very easy by this frame. On higher, dryer sections it is recommended to use also a separate earthpin to optimal functioning of the used fencers.

3. MOUNTING BASE/ FOOT

Handy mounting base or foot for a Koltec battery device. Solid base with which you can move the fencers from one section to an other. The base functions also as earthpin. On higher and dry sections we recommend the use of an extra earthpin.

Special cable set for the connection of your battery powered fencer with a car/tractor battery. This set protects your fencer against connection failures. The set has also a builtin battery protector against discharge of the battery below the critical level. A dual-led gives the indication that power is supplied and when the tension of the battery becomes





5. BATTERY-LEADS

critical.

Handy, but basic connection cable between 12 Volt car/tractor battery and 9-12 Volt energiser.

6. CONNECTION SET

Handy set for the connection between fence energiser, fence and earthpin. Length 150 cm.

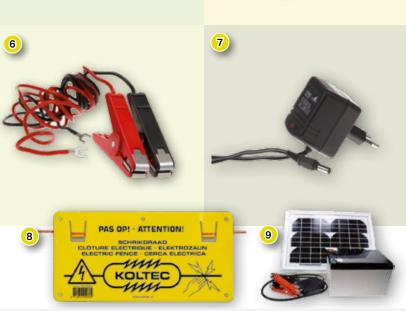
DC adapter of 9 Volt to connect the EC25 or EB15 to mains.

8. ELECTRIC FENCE WARNING SIGN

Obligatory with an electric fence at a public road. The sign has to be placed every 50 m.

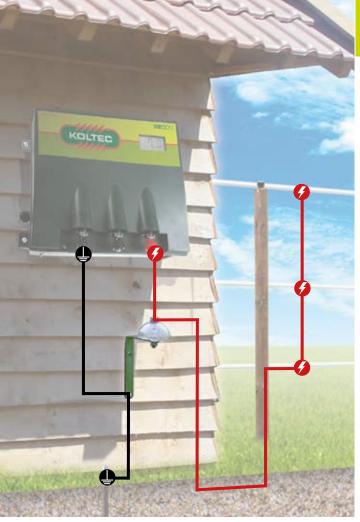
9. SOLAR KIT, 5 Watt

Handy kit to turn around your 12 Volt dry battery device into a solar unit. The kit contains a 5 Watt panel, 12 Volt - 12 Ah gel-battery and a connection kit.



Art. nr.	Description	PU	€ price/PU
162-85466	Frame for EC-models, with integrated earthing connection	1	
162-85465	Frame for ST, with integrated earthing connection	1	
152-70301	Mounting base for the EC25, EC20 and HS75	1	
152-70302	Mounting base for the HB15 and EB15	1	
162-60000	Connection kit for wet cell 12 Volt battery, LED indication for charging + battery saver	1	
152-80017	Connection kit for 12 Volt batteries	1	
162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
135-39995	Adapter DC 9 Volt	1	
162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	
162-85507	Solar kit 5 Watt for (12 Volt) dry battery powered devices	1	
	162-85466 162-85465 152-70301 152-70302 162-60000 152-80017 162-85608 135-39995 162-39501-4	162-85466 Frame for EC-models, with integrated earthing connection 162-85465 Frame for ST, with integrated earthing connection 152-70301 Mounting base for the EC25, EC20 and HS75 152-70302 Mounting base for the HB15 and EB15 162-60000 Connection kit for wet cell 12 Volt battery, LED indication for charging + battery saver 152-80017 Connection kit for 12 Volt batteries 162-85608 All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm 135-39995 Adapter DC 9 Volt 162-39501-4 Signs "Warning electric fence", obligatory along public roads (4)	162-85466Frame for EC-models, with integrated earthing connection1162-85465Frame for ST, with integrated earthing connection1152-70301Mounting base for the EC25, EC20 and HS751152-70302Mounting base for the HB15 and EB151162-60000Connection kit for wet cell 12 Volt battery, LED indication for charging + battery saver1152-80017Connection kit for 12 Volt batteries1162-85608All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm1135-39995Adapter DC 9 Volt1162-39501-4Signs "Warning electric fence", obligatory along public roads (4)4

SPECIAL CONNECTIONS





1. LIGHTNING DIVERTER

Fence energisers are sensitive for lightning. With the proper prevention measures, the chance of possible damage to the energisers can be reduced.

The KOLTEC lightning diverter offers the necessary protection by diverting the over tension in the air to the ground. With this the chance on a lightning stroke and therefore damage on your energiser will be reduced.

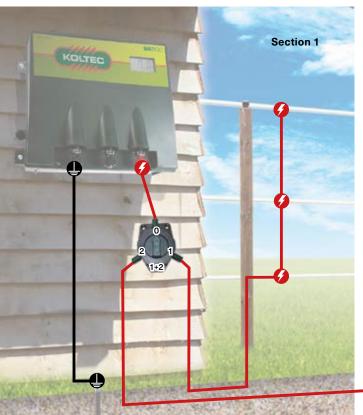
2. SECTION SWITCH

The switch has 4 positions you can choice bet-

- 0 = The tension is not transmitted
- 1 = Section 1 under tension
- 2 = Section 2 under tension
- 1+2 = Section 1 & 2 under tension







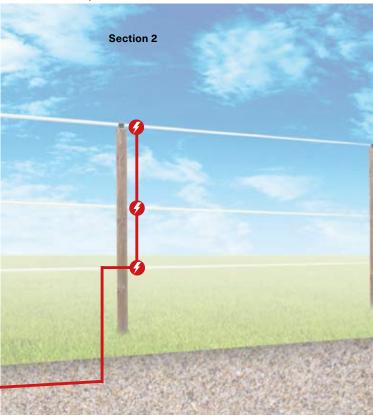


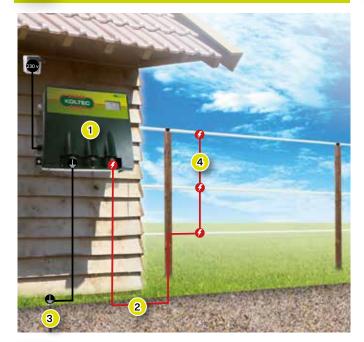
Photo	Art. nr.	Description	PU	€ price/PU
1	162-80175-1	Lightning diverter	1	
2	162-85470	Switch, high voltage, for connecting sections, two exit terminals	1	

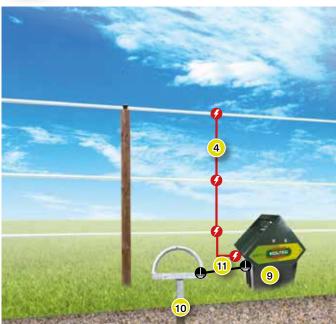
230 VOLT

Mains energisers 230 VOLT



Battery energisers 9-12 VOLT



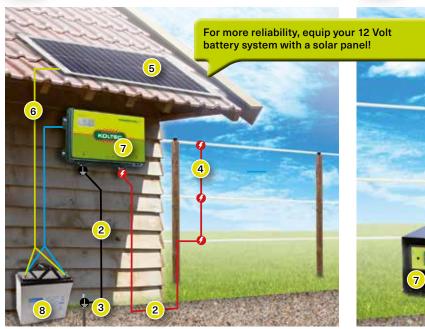


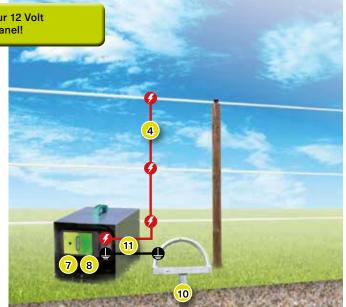


Battery ENERGISERS 12 VOLT



Battery ENERGISERS 12 VOLT





- 1. MAINS ENERGISER (See from page 18)
- 2. HIGHTENSION CABLE (See page 43)
- 3. EARTH STAKE (See page 47)
- 4. LINKING KIT (See page 72)
- 5. SOLAR PANEL (See page 34)
- 6. EXTENSION CABLE (See page 34)
- 7. WET CELL BATTERY ENERGISER (See page 26)
- 8. WET CELL BATTERY (See page 32)
- 9. BATTERY ENERGISER (See page 36)
- 10. MOBILE EARTH STAKE (See page 47)
- 11. CONNECTION KIT (See page 44)

Optional connection of lightning diverter and/or switch, see page 41.

KOLTEC TIP

If you have to connect your device to the grid by bridging a distance over 25 meter use the high voltage cable with 2.5 mm solid core.

HIGH TENSION CABLE

To connect mains energisers and gate connections always use high tension cable. High Tension cable has an insulation grade of more than 10,000 Volt. Normal electricity wire and groundcable only has an insulation grade of around 800 Volt. Due to that that you will get short cuts in your systeem.

1. GROUND CABLE
High Tension cable with INOX braid.
Connectmains energisers and gate connections always use high tension cable has an insulation grade of more than 10,000 Volt. Due to that that you will get short cuts in your systeem.

2. HIGH TENSION CABLE

as an earth lead/rod.

Cable to connect the fence energiser to fences over longer distances. Also extremely suitable to connect earthpins to the fence energiser. Suitable for underground connections, however the cable must be led through a PVC-tube. Double insulated, with 7 strand INOX core of 2 mm². Insulation value is 12,000 Volt.

3. STIRDY HIGH TENSION CABLE

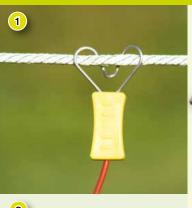
HT-cable with a zinc plated, solid core of 2.5 mm. Double insulated with an insulation value of 12,000 Volt.

4. STIRDY HIGH TENSION CABLE

HT-cable with a zinc plated, solid core of 1.6 mm. Double insulated with an insulation value of 12,000 Volt.

Photo	Art. nr.	Description	PU	€ price/PU
1	162-36124-10	Ground cable, HT-cable with INOX braid, 10 m	10	
2	133-36122-05	High tension cable, coil with 5 m, flexible 7 strand inox core	5	
	133-36122-10	High tension cable, coil with 10 m, flexible 7 strand inox core	10	
	133-36122-50	High tension cable, coil with 50 m, flexible 7 strand inox core	50	
	133-36122-500	High tension cable, plastic reel with 500 m, flexible 7 strand inox core	500	
3	162-36125-20	High-voltage cable with solid zinc plated 2,5 mm core, 20 m	20	
	162-36125-50	High-voltage cable with solid zinc plated 2,5 mm core, 50 m	50	
	162-36125-100	High-voltage cable with solid zinc plated 2,5 mm core, 100 m	100	
4	162-36126-20	High-voltage cable with solid zinc plated 1,6 mm core, 20 m	20	
	162-36126-50	High-voltage cable with solid zinc plated 1,6 mm core, 50 m	50	
	162-36126-100	High-voltage cable with solid zinc plated 1,6 mm core, 100 m	100	
	162-36126-500	High-voltage cable with solid zinc plated 1,6 mm core, 500 m	500	
5	162-26130	HT-cable connector. For the connection of 2 HT-cables.	1	
6	162-26132	HT-cable splitter and connector. For the connection of 3 HT-cables	1	

CONNECTION MATERIAL













For the connection of your battery or wet cell battery device you can use for an optimal tension transit one of the underneath connection kits.

1. CONNECTION SET

Set with simple, heart shape connector

2-4. CONNECTION SETS

Handy sets for the connection between fence energiser, fence and earthpin. Length 150 cm.

5. SEPARATE CROCODILE CLIPS

Two red and two black.

For the connection of your mains or wet cell battery energizer with the fence by means of a high-tension cable, you can use underneath connectors.

6. TAPE CONNECTION KIT

Separate INOX tape connector plates with connection eye for flexible HT-cable. Cables with a solid core can be connected by twisting an eye and with the ring connecting below the butterfly nut. **Per 2 pcs.**

7. ROPE CONNECTORS

Handy, good conducting INOX rope connector with butterfly-nuts for easy mounting without wrenches. Per 4 pcs.

8 - 11. WIRE CLAMP

 $\label{local_local} \mbox{Ideal connector for connecting high voltage cable to high tensile wire and making connections between high tensile wires.}$









Photo	Art. nr.	Description	PU	€ price/PU
1	162-85600	Connection kit with heart shape connector	1	
2	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
3	162-85607	Connection kit, INOX, for rope, length 150 cm	1	
	162-85609	Connection kit for wire, INOX, length 150 cm	1	
4	162-85606	Connection kit, INOX, for tape, length 150 cm	1	
5	162-85610-4	Clips, crocodile, 2 red + 2 black, synthetic with INOX teeth and spring	4	
6	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
7	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
8	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
9	162-85483-4	L-Wire clamp, per 4 pieces	4	
10	162-85484-4	O-Wire clamp, per 4 pieces	4	
11	162-85485-4	W-wire clamp, per 4 pieces	4	







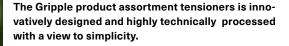


6









By the delivery of a significant easier system against the traditional methods, and eliminating the need for manual connecting and knotting of the wire, the work and installation time has been significantly shortened.

Gripple systems are carefully developed, which ensures that we can offer complete solutions for a wide range of applications. One of the many strengths of the patented push-fit technology is the versatility; this makes it possible to transform all kinds of fencing-, supporting-, trellis- and anchoring applications into easy labour-saving tasks.

- · Connects and tensions in one movement.
- Saves the twisting and knotting of metal wire, which reduces the installation time drastically.
- Ideal for use as well on sturdy steel wire with a high breaking strength as soft steel wire.
- Designed for a high carrying capacity and excellent rust resistance.
- Easy to tension again, year after year



		•		_
Photo	Art. nr.	Description	PU	€ price/PU
1	162-39419-4	Unlocking key for Gripple joiners	4	
	162-39419-25	Installers Torq Tensioning Tool, metal	25	
2	162-39421-4	Twister, wire end clamp 100 pcs	4	
	162-39421-25	Twister, wire end clamp 25 pcs	25	
3	162-39423-4	T-Clip 2 3,25 mm - 4,2 mm, 4 pcs	4	
	162-39423-25	T-Clip 1 1,8 mm - 3,25 mm, 4 pcs	25	
4	162-39415-6	Gripple Barbed wire joiner, 6 pcs	6	
	162-39415-15	Gripple Plus Large 3,25 mm - 4,2 mm 25 pcs	15	
5	162-39412	Gripple Plus Medium 2,0 mm - 3,25 mm 4 pcs	1	
6	162-39413-25	Gripple Plus Large 3,25 mm - 4,2 mm 4 pcs	25	
	162-39413-100	Gripple Plus Medium 2,0 mm - 3,25 mm 25 pcs	100	
7	162-39417-4	Gripple Barbed wire joiner, 15 pcs	4	
	162-39418-4	Torq Tensioning Tool, synthetic	4	
8	162-39424-2	GP-fix 2 st voor 1.8 - 3.2 mm repair kit	2	
9	162-39410	Gripple Plus Small 1,4 mm - 2,2 mm 4 pcs	1	
10	162-39411	Gripple Plus Small 1,4 mm - 2,2 mm 25 pcs	1	
		DU Paglin	a Hait D	wise in al MAT

PU=Packing Unit Price incl. VAT

ABOUT EARTHING

The importance of earthing

The earthing takes care of the fact that, when an animal touches the fence, the circuit is being closed and the current is flowing through the animal. This causes an electrical shock to deter the animal.

For an optimal working of the electric fence good earthing is essential. The earthing has to be as such that a very low resistance is present (not higher than 100 Ohm). Optimal is a copper or copper coated earth pin with a diameter of about 20 mm,

which is connected to the groundwater level. This however cannot always be realised. In order to get good earthing, we recommend the connection of at least 2 earth pins with a length of 1 meter (code 162-80199, on page 43) parallel and/or in series with each other, with an interval of 3 meters.

When you want to have the maximum use of your electric fencer, then earthing is of crucial importance. Without sufficient earthing the system can never work properly.

"The maximum use of your energiser is only established with sufficient earthing."

TESTING

- Measure the tension on the earth pin with a voltmeter*.

 This measured tension must not be higher than 300 Volt. The reference for your voltmeter is the earth.
- 2 Measure with a voltmeter* if, at least 100 meters from the earthing, if there is more than 3.000 Volt on your fence. The reference for your voltmeter* is the earth.
- **3** Ensure that on this measure point a short circuit is being made by connecting the conductor with the earth, for instance by placing a conducting pole (iron/aluminium) against the wire.
- Measure the voltage on the earthing in this condition.
 Is the voltage more than 300 Volt, then the earthing is insufficient and you have to install more earth pins in order to create an optimal electric fence.
- After having installed more poles do the above test again. To make sure the goals above are achieved.
 - * = High tension voltmeter, see page 116



EARTH STAKES

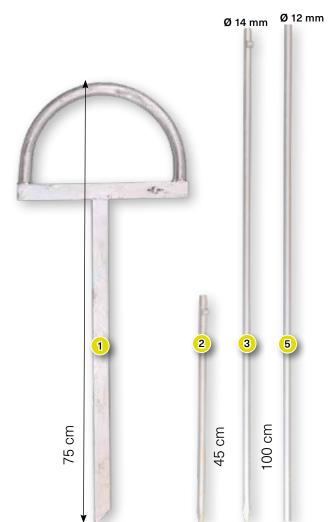










Photo	Art. nr.	Description	PU	€ price/PU
1	162-80197	Earth stake, 75 cm, for mobile devices	1	
2	162-80198	Earth stake, short, 45 cm with connector	1	
3	162-80199	Earth stake, long, 100 cm with connector	1	
4	162-80194	Earthpin set 2 m, incl. clamp and connection sleeve	1	
5	162-80195	Earthpin, 1 m 12 mm, excl. connection clamp	1	
6	162-80200	Connection sleeve for 12 mm earthpins	1	
7	162-80196	Connection clamp for earth pins	1	
8	162-85466	Frame for EC-models, with integrated earthing connection	1	
9	162-85465	Frame for ST, with integrated earthing connection	1	













1. POWERGARD XP

Strong and intelligent

2. TRACTION BATTERY

12 Volt - 105 Ah

3 - 4. REELS

Stirdy reels with a high capacity.

5. TENSIONER

Re-inforced, black plastic tensioner

5. TENSION KIT WITH SMALL SPRING

7. POLY POST

Good price - quality balance

8. POLY WIRE

Blue poly wire, which is very visuable for e.g. wild pigs.

9. CARRY CASE

Handy case for a fencer, battery and solar panel



Crop protection

Even though electric fence systems are usually meant to keep animals within a certain area, there are also situations conceivable where animals need to be shut out.

For example to protect crops against unwanted wild animals like deer and wild pigs.

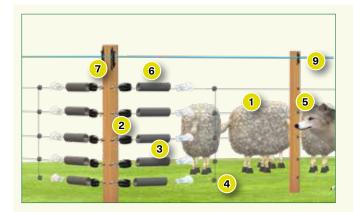
KOLTEC has put together a kit for this situation which ensures you directly of an optimal electric fence.







Photo	Art. nr.	Description	PU	€ price/PU
1	160-81087	Energiser KOLTEC Powergard XP 3,2 J 12 Volt battery device, incl. mains adapter	1	
2	163-45547	Traction battery, double pool, 12Volt-105Ah	1	
3	162-39029	Reel, large with strap	1	
4	162-39025	Reel, large geared 1:3 for 200 mtr tape/500 mtr polywire	1	
5	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
6	162-70509	Strain set with strainer, egg-insulator with galvanized hooks and small spring	1	
7	162-80325-10	Posts, synthetic, white 105 cm, budget only per 10	10	
8	162-39040	Wire, blue 3*0,2niro + 3*0,25Cu 1000 mtr	1000	
	162-39041	Wire, blue 400 m, 21 PE + 3*0,2 INOX + 3*0,25 Cu, breaking strength 90 kg, resistance 0,10 Ohm/m	400	
9	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	



Fence type 1: Permanent fence

Advice:

Install at least 4 but even better 5 steel wires with above a blue 20 mm tape. The wider 20 mm tape discourages the wolf to jump over the grid. Minimal fence height 120 cm. Adviced conductor heights: 15/30/50/70/100/130 cm (blue 20 mm tape)

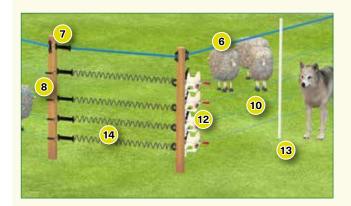


Fence type 2: Permanent existing (ursus) gauze fence

Advice:

Install at least 2 wires with offset insulators (on the outside). The first wire installed on max 15 cm off the ground to prevent that the wolf can dig underneath the fence. The second wire installed on top of the fence but at least on 120 cm height to prevent jumping over or against the fence.

As extra security a third wire can be installed on 40 cm. Minimum fence height is 120 cm. If the existing fence is to low, you can easily higher the fence by using the KOLTEC pigtail (offset) insulators.

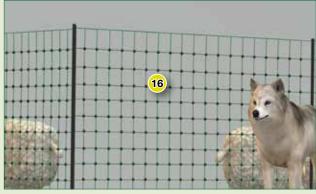


Fence type 3: Temporary fence with reels

20/40/65/90/120 cm (blue 20 mm tape)

Advice:

Install at least 4 wires and above a 20 mm blue tape. The wider blue tape discourages the wolf to jump over the fence. Minimum fence height is 120 cm. Adviced conductor heights:



Fence type 4: Netting

Advice

Use the 2-pins poultry nets because these are 120 cm high and are very solid to place compared to the standard sheep nets which are 90 cm high. If you already use the standard sheep nets then they can be adjusted from 90 cm to a fence height of 120 cm by adding spare 2-pins posts for poultry nets. On these posts an extra (with preference for blue) electric wire or tape can be installed.



Energiser

Advice:

The fencer has to be powerful and suitable with the type of fence and fencing length. For mobile fences longer than 200 meter or with more than 2 nets, we advise the use of powerful wet cell battery powered energisers as the KOLTEC Powergard or Powergard XP. Because the wire close to the ground often has to deal with growth of weed, these wet cell battery powered energisers will always supply enough power to assure a sufficient tension on the fence.



Photo	Art. nr.	Description	PU	€ price/PU
1	162-39221	Wire, aluminised steel, \pm 650 m 2,5 mm, 25 kg, breaking strength 500 kg, resistance 35	650	
2	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
	162-80077-4	Egg-insulators without hooks in package	4	
3	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
4	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
5	162-80086-25	Ring insulators with iron core	25	
6	162-39060	Tape, blue 20 mm, 4*0,2INOX+1*0,25Cu+1*0,15INOX cross	200	
7	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
8	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
9	162-80400-25	Tape insulators KOLTEC, short for wooden posts per bag	25	
10	162-39041	Wire, blue 400 m, 21 PE + 3*0,2 INOX + 3*0,25 Cu, breaking strength 90 kg, resistance	400	
11	162-80123	Offset pigtail insulator, green, 20 cm 8 mm, for wooden posts	1	
12	162-39025	Reel, large geared 1:3 for 200 mtr tape/500 mtr polywire	1	
	162-60021	Support bracket for reel 162-39024 & 25	1	
13	162-80338-10	Posts, synthetic, black 154 cm, budget only per 10	10	
14	162-80004	Gate kit with spring, galvanized, not suitable for horses	1	
15	162-65016	Screw eye, Ø 12 mm 168 mm long with wood thread	1	
	162-65015	Screw eye, Ø 12 mm 278 mm long with wood thread	1	
16	880 0013-391	Wolf net 130 cm, 50 mtr	1	
	880 0013-392	Net for wolves and wildlife, 165 cm, 50 mtr	1	
17	162-80009-25	Click insulators, red, for ø 12 mm posts	25	
18	160-81087	Energiser KOLTEC Powergard XP 3,2 J 12 Volt battery device, incl. mains adapter	1	
	160-81037	Energiser KOLTEC Powergard 2,0 Joule, incl. mains adapter	1	
19	162-60015	Box to carry a wet cell battery and/or Powergard or PG energiser	1	
20	162-85515	Solar panel 20 Watt incl. charge regulator for Powergard XP, 48 * 37 cm 2,6 kg $$	1	

PU=Packing Unit Price incl. VAT

ZOO & WILDLIFE PARKS

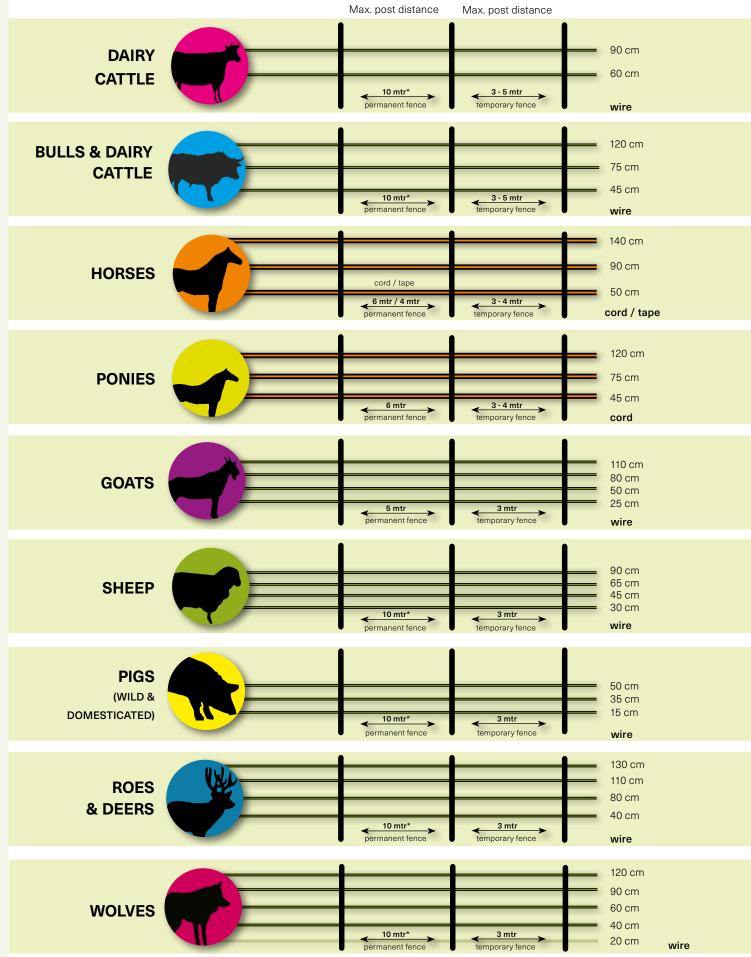
EXTREME CIRCUMSTANCES

For some considerable time KOLTEC is occupied with the development of electric fences for special projects as Zoo's and Wildlife parks. It is obvious that the requirements here are at a much higher level than for the common farm cattle.

Some animals can be extremely dangerous for people and that requires a well-balanced fence plan. In some other cases the animals are just insensitive for current or very handy in avoiding the electric wires. Per type of animal will therefore always be searched for a suitable made-to measure solution.

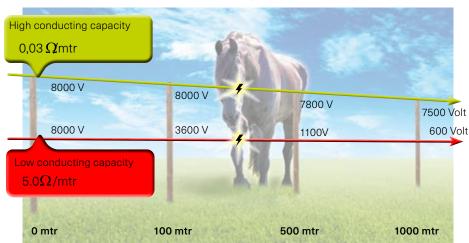






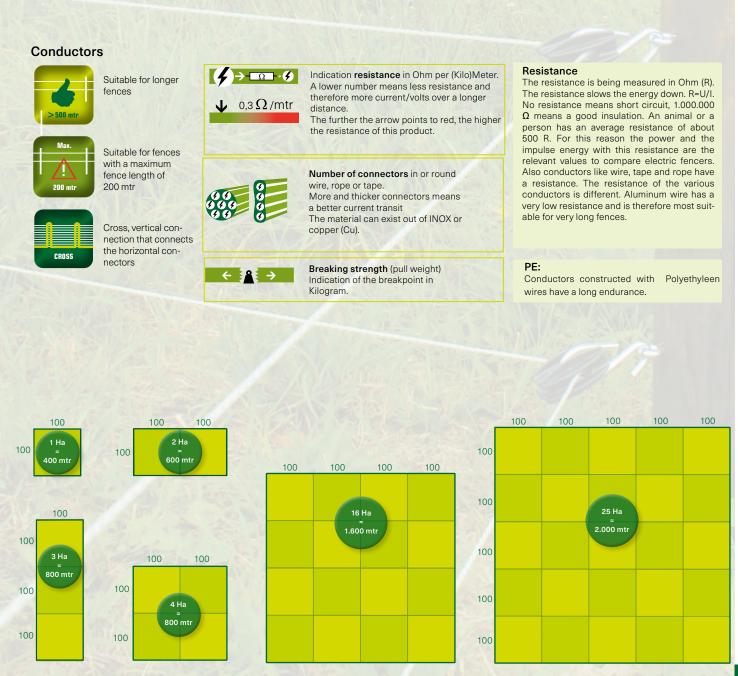
CONDUCTOR INFORMATION

Example indication of difference in conducting capacity



CEE Application length

This is the length of your fence, based on an ideal wire at one meter and at 20 degree celcius, where the tension at the end of the wire is still 1.500 Volt. This length will be shorter with wires on lower heights, vegetation growth and wire with a higher resistance. The length will again be influenced negative by the use of poly wire with a higher resistance.

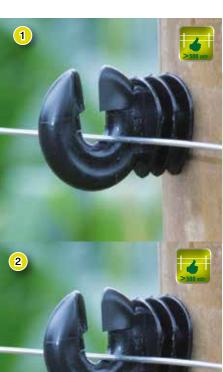


ACCESSORIES



Photo	Art. nr.	Description	PU	€ price/PU
1	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
2	162-80152-8	Insulation tubes, synthetic with iron inlay, 60 cm long, for max. 3 mm wire	8	
3	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
4	162-70508	Strain set with strainer, egg-insulator with INOX hooks and small spring	1	
5	162-80174-250	Ring insulators with iron core, for wooden posts, bucket 250 pieces	250	
6	162-80085-100	Ring insulators standard, bucket	100	
7	162-80086-200	Ring insulators with iron core, bucket	200	
8	162-80081-100	W-insulators, black, in bucket, strong insulators for wire and rope	100	
9	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
10	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
11	162-80140	Ratchet strainer, solid for aluminium and steel wire	1	
12	162-80160-2	Straining set, INOX, for rope, with hook and screw eyes	2	
13	162-80145	Wire strainer, large, galvanized, 13 cm long and 5 cm wide (nr.4)	1	
14	162-80144	Wire strainer, small, galvanized, 10 cm long and 3 cm wide (nr.2)	1	
15	162-85479-3	Wire connector for steel wire 1.8 - 2.5 mm	3	
16	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
17	162-85458	Fencing tool, multifunctional	1	
18	162-85482	Wire plier for steel wire	1	

2024



ALUMINUM WIRE



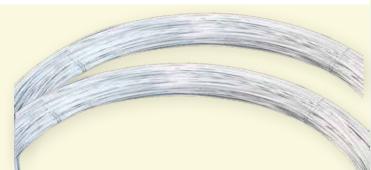


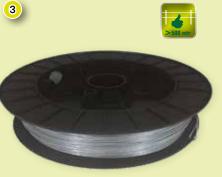
ALUMINUM WIRE

ALUMINISED STEEL WIRE









ZINC PLATED WIRE 2.0





RVS/INOX316 STEEL WIRE

Ø	2.0 mm
V	50 Ω / km
	esistance / widerstand
2	♣ → 50 KG



Photo	Art. nr.	Description	PU	€ price/PU
1	162-39200	Wire, aluminium, 1,6 mm, 2,4 kg	400	
	162-39205	Wire, aluminium, 1,6 mm, 4,8 kg	800	
	162-39220	Wire, aluminium, 2,0 mm, 3,6 kg	400	
2	162-39225	Wire, aluminised steel, 1,6 mm 25 kg	1580	
	162-39221	Wire, aluminised steel, 2,5 mm 25 kg	650	
3	162-39222	Wire, galvanized, 2,0 mm, 10 kg	400	
4	162-39227	Wire, inox316, twined 7*19 2,0 mm	200	
	162-39228	Wire, inox316, twined 7*19 2,0 mm	500	



Photo	Art. nr.	Description	PU	€ price/PU
1	162-70500-4	Egg-insulators, black, with 1 hook and screw eye	4	
2	162-80085-25	Ring insulators, standard	25	
3	162-80088-25	Ring insulators, small for wooden constructions	25	
4	162-80081-25	W-insulators, black, strong insulators for wire and rope	25	
5	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
6	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
7	162-85613-2	Reel cable kit, connecting conductors to main fence	2	
8	162-85605-2	Connection kit, INOX, for wire, with 70 cm long wire	2	
9	162-39091-4	Connectors, single for wire up to 4 mm, galvanized with wing nuts	4	
	162-39093-4	Connectors, single for wire up to 4 mm, INOX, with wing nuts and connection tab	4	
10	162-39096-4	Connectors for wire up to 4 mm, galvanized, with wing nuts	4	
	162-39099-4	Connectors for wire up to 4 mm, INOX, with wing nuts	4	
11	162-80150-wit	Strainer reinforced, synthetic, white, for wire	1	
	162-80150-2wt	Strainer reinforced, synthetic, white, for wire, package of 2	2	
12	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
13	162-80176-2	Wire strainer for thin synthetic wire	2	
13	102-801/0-2	whe shamer for thin synthetic wife	2	

3 mm

Ø





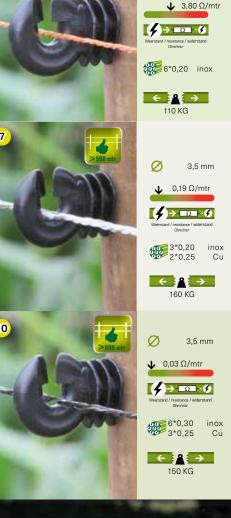


0,13 Ω/mtr

inox

4*0,20 2*0,30

← 🔏 →





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Photo	Art. nr.	Description	PU	€ price/PU	Photo	Art. nr.	Description	PU	€ price/PU
1	162-39000	Wire, orange, 12 PE	100		7	162-39100	Wire poly, white gr/rd, 36 PE	250	
	162-39020	Wire, orange, 12 PE	250			162-39105	Wire poly, white gr/rd, 36 PE	500	
2	162-39010	Wire, black, 12 PE	100			162-39104	Wire poly, white gr/rd, 36 PE	1.000	
	162-39015	Wire, black, 12 PE	250		8	162-39121	Wire, braided wt/gr, 24 PE	200	
3	162-39023	Wire, green, braided	100			162-39122	Wire, braided wt/gr, 24 PE	500	
4	162-39004	Wire, orange, 24 PE	250			162-39123	Wire, braided wt/gr, 24 PE	1.000	
	162-39005	Wire, orange, 24 PE	500		9	162-39121	Wire, braided wt/gr, 24 PE	200	
5	162-39008	Wire, white, 24 PE	250			162-39122	Wire, braided wt/gr, 24 PE	500	
	162-39009	Wire, white, 24 PE	500			162-39123	Wire, braided wt/gr, 24 PE	1.000	
	162-39011	Wire, white, 24 PE	1.000		10	162-39127	Wire, black, 30 PE	200	
6	162-39041	Wire, blue 21 PE	400			162-39126	Wire, black, 30 PE	500	
	162-39040	Wire, blue 21 PE	1.000			162-39124	Wire, black, 30 PE	1.000	

PU=Packing Unit Price incl. VAT

ACCESSORIES



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
2	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
3	162-80170-100	Ring insulators KOLTEC, in bucket	100	
4	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
5	162-80081-100	W-insulators, black, in bucket, strong insulators for wire and rope	100	
6	162-80180-100	W-insulators, white, in bucket, strong insulators for wire and rope	100	
7	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
8	162-70504-4	Egg-insulators, black, with 1 INOX hook and INOX screw eye	4	
9	162-70604-4	Egg-insulators, white, with 1 INOX hook and INOX screw eye	4	
10	162-39097-4	Connectors for rope up to 8 mm, galvanized, with wing nuts	4	
	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
11	162-39092-4	Connectors, single for rope up to 8 mm, galvanized with wing nuts	4	
12	162-39094-4	Connectors, single for rope up to 8 mm, INOX, with wing nuts and connection tab	4	
13	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
14	162-85607	Connection kit, INOX, for rope, length 150 cm	1	
15	162-85604-2	Connection kit, INOX, for rope, with 70 cm long wire	2	
16	162-85601-2	Connection kit, INOX, tape to rope, with 70 cm long wire	2	





100% POLYETHYLENE TWINED CORD

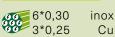
This cord is very securely twined with 9 conductors that provide very low resistance. The material is highly UV-resistant and, combined with professional assembly, ensures a very long lifespan of more than 10 years.

PE CONSTRUCTION

6 mm

0,03 Ω/mtr







SOFT CORE, WITH BRAIDED PE SURFACE

This is a safe rope with a soft contact surface and a breaking strength of only 225 kg. By the construction of a soft core with around it a woven structure of PE-wires this rope will stretch a little if an animal in panic want to flee through it or in the unlikely event get entangled.











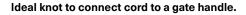
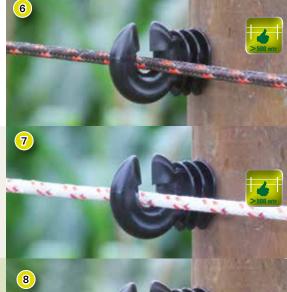


Photo	Art. nr.	Description	PU	€ price/PU
1	162-39128	Rope, green, PE	200	
	162-39133	Rope, green, PE	500	
2	162-39129	Rope, white, PE	200	
	162-39134	Rope, white, PE	500	
3	162-39131	Rope, black, PE	200	
	162-39132	Rope, black, PE	500	
4	162-39120	Rope, 6 mm white/gr braided	200	
	162-39118	Rope, 6 mm white/gr braided	500	
	162-39110	Rope, 4 mm white/gr braided	200	
	162-39112	Rope, 4 mm white/gr braided	500	

PU=Packing Unit Price incl. VAT







	Ø 6 mm
ì	Φ 0,08 Ω/mtr
	Weenstand / resistance / widenstand Ober/inter
ķ	8*0,20 inox 3*0,30 Cu
	← ♣ → 225 KG





Photo	Art. nr.	Description	PU	€ price/Pu
5	162-39146	Rope, 6 mm brown/gr, braided	200	
	162-39147	Rope, 6 mm brown/gr, braided	500	
6	162-39116	Rope, 6 mm brown/rd, braided	200	
	162-39117	Rope, 6 mm brown/rd, braided	500	
7	162-39114	Rope, 6 mm white/rd, braided	200	
	162-39115	Rope, 6 mm white/rd, braided	500	
8	162-39144	Rope 6 mm braided black/rd	200	
	162-39145	Rope 6 mm braided black/rd	500	
9	162-39021	Rope, 5 mm white gr/rd PP	200	
	162-39022	Rope, 5 mm white gr/rd PP	500	

PU=Packing Unit Price incl. VAT

POLY TAPE 20 / 12,5 mm





This tape has a quick transfer of the shock because on the outer edge of the PE reinforced outsides bundles run with 2 INOX wires within turned a thick 0.25 Cu (copper) wire. Once an animal is hanging over the tape or want to graze underneath there is direct contact and the shock is quickly transferred. The applied **cross connection** every 14 cm ensures a long life of the high conductive ability of this tape.







Suitable for fences with a maximum fence length of 200 mtr



Cross, vertical connection that connects the horizontal connectors

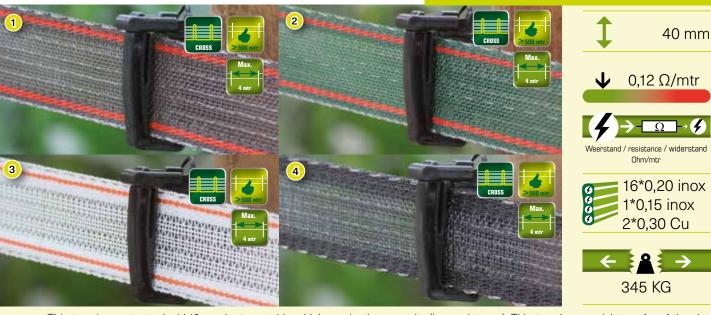


Suitable for longer fences



Recommended distance between two poles.

Photo	Art. nr.	Description	PU	€ price/PU
1	162-39061	Tape reinforced, white/rd, PE	200	
2	162-39062	Tape reinforced, br./rd, PE	200	
3	162-39072	Tape, white gr/gr PE	200	
4	162-39058	Tape, black, PE	200	
5	162-39060	Tape, blue, PE	200	
6	162-39063	Tape, white , PE	200	
7	162-39071	Tape, white gr/gr PE	200	



This tape is constructed with19 conductors and has high conducting capacity (low resistance). This tape has a quick transfer of the shock because on the outer edge of the PE reinforced outsides bundles run with 4 INOX wires within turned a thick 0.30 Cu (copper) wire. Once an animal is hanging over the tape or want to graze underneath there is direct contact and the shock is quickly transferred. The applied cross connection every 14 cm ensures a long life of the high conductive ability of this tape.



















10*0,20 1*0,15	inox inox
2*0,25	Cu



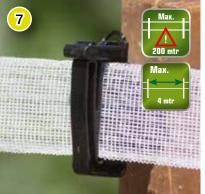






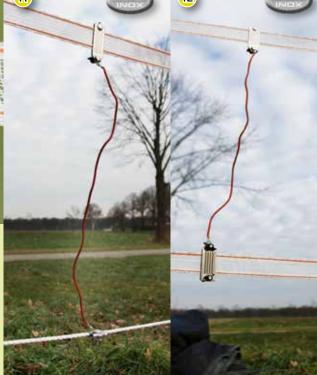
Photo	Art. nr.	Description	PU	€ price/PU
1	162-39082	Tape reinforced, brown/red, PE	200	
	162-39086	Tape reinforced, brown/red, PE	400	
2	162-39081	Tape reinforced, green/red, PE	200	
	162-39085	Tape reinforced, green/red, PE	400	
3	162-39080	Tape reinforced, white/red,PE	200	
	162-39084	Tape reinforced, white/red,PE	400	
4	162-39083	Tape reinforced, black, PE	200	
	162-39087	Tape reinforced, black, PE	400	
5	162-39070	Tape, white/green, PE	100	
	162-39073	Tape, white/green, PE	200	
	162-39076	Tape, white/green, PE	400	
6	162-39078	Tape, brown/green, PE	100	
	162-39077	Tape, brown/green, PE	200	
	162-39075	Tape, brown/green, PE	400	
7	162-39065	Tape, white, PE	200	











_		,	
T=	Incl.	/ Inkl.	

Photo	Art. nr.	Description	PU	€ price/PU
1	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
2	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
3	162-80173-3	Tape strainer, synthetic	3	
4	162-80400-100	Tape insulators KOLTEC, short for wooden posts in bucket	100	
5	162-80404-25	Inbetween insulator for tape, bag with 25 pcs	25	
	162-80404-100	Inbetween insulator for tape, bucket with 100 pcs	100	
6	162-80142-4	Connectors, INOX, for tape up to 50 mm	4	
7	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	4	
8	162-80172-4	Corner insulator for tape, with strain handles, 4 pieces	2	
9	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
10	162-85606	Connection kit, INOX, for tape, length 150 cm	1	
11	162-85601-2	Connection kit, INOX, tape to rope, with 70 cm long wire	2	
12	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	



Suitable for longer fences



Suitable for fences with a maximum fence length of 200 mtr



Cross, vertical connection that connects the horizontal connectors



Recommended distance between two poles

Use in combination with plastic posts for temporary fences rope or 20 mm tape. Wider tape catches to much wind and that will blow the posts down.





Use by a permanent fence the right insulators with a special 20 mm slit to maximize the period of use. You can find more information about tape insulators on page 82.





Photo	Art. nr.	Description	PU	€ price/PU
1	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
2	162-70604-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
3	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
4	162-39088	Connector for rope up to 10 mm, INOX, with M6 nuts	1	
5	162-80081-100	W-insulators, black, in bucket, strong insulators for wire and rope	100	
6	162-80180-100	W-insulators, white, in bucket, strong insulators for wire and rope	100	
7	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
8	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
9	162-80123	Offset pigtail insulator, green, 20 cm 8 mm, for wooden posts	1	
10	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
11	162-79700-25	W-skirt insulator M8/M10/M12	25	
12	162-80035-25	W-skirt insulators, large, black, incl. short 8 mm bracket for wooden posts	25	

Hippo Long Life is 8 mm thick and finished on the outside with polyester synthetic material. The inside exists of a pp. fiber which makes the product feels soft. The conductors exist out of 6 thick INOX wires of 0,4 mm and 3 Long Life copper wires of 0,7 mm thick. The copper wires are coated with a plastic, conducting alloy and processed on the inside of the polyester braid, which protects them very well against corrosion and mechanical influences. The INOX wires are processed crosswise and make the contact to the outside.

Because the product is light and flexible, it is easier to install. The polyester outside takes care of a smooth finishing. With the braiding of INOX wires in the casing the contact surface is larger, making the fence more effective. Mounted in a permanent way, the life time is very long. The expected lifetime is more than 10 years.

- Very good conduction
- Soft
- **Smooth surface**
- Large contact surface
- **Highly visible**
- Long lifetime
- Simple installation
- Very high UV-durability





← 2 →
700 KG

Photo	Art. nr.	Description	PU	€ price/PU
1	162-39137	Hippo Long Life, white	300	
2	162-39139	Hippo Long Life, brown	300	

PU=Packing Unit Price incl. VAT

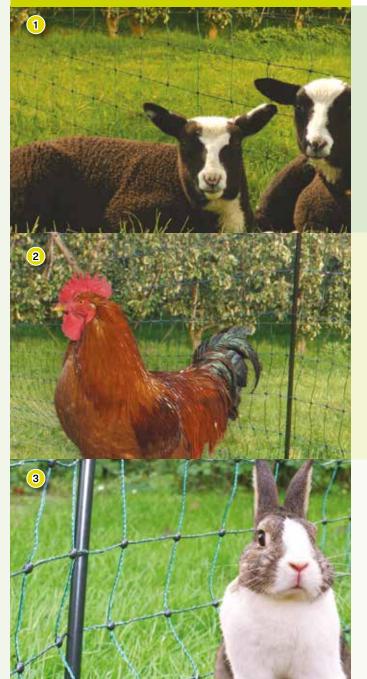
LONG LIFE CABLE



			The state of the s	Section 1997
Photo	Art. nr.	Description	PU	€ price/PU
1	162-79700-25	W-skirt insulator M8/M10/M12	25	
2	162-70505	Strain set, INOX, egg-insulator with hook, spring and ratchet strainer	1	
3	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
4	162-70604-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
5	162-80149-rvs	Straining spring, large, INOX, for steel wire	1	
6	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
7	162-80081-100	W-insulators, black, in bucket, strong insulators for wire and rope	100	
8	162-80180-100	W-insulators, white, in bucket, strong insulators for wire and rope	100	
9	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
10	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
11	162-85472	Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators	1	
12	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
13	162-70506	Egg-insulator with two INOX hooks, single	1	
14	162-85479-3	Wire connector for steel wire 1.8 - 2.5 mm	3	
15	162-39033	Wire dispenser for heavy steel wire & Long Life Cable	1	



NETTING



1. Electrified netting for sheep (Green)

Strong sheep net with moulded junctions on 8 horizontal, green strands. The bottom strand is always black and has no conductors. Posts have a single or double spike of 18 cm. The net is 25 or 50 mtr long en 84 cm high. The space between the vertical twines is 16,5 cm.

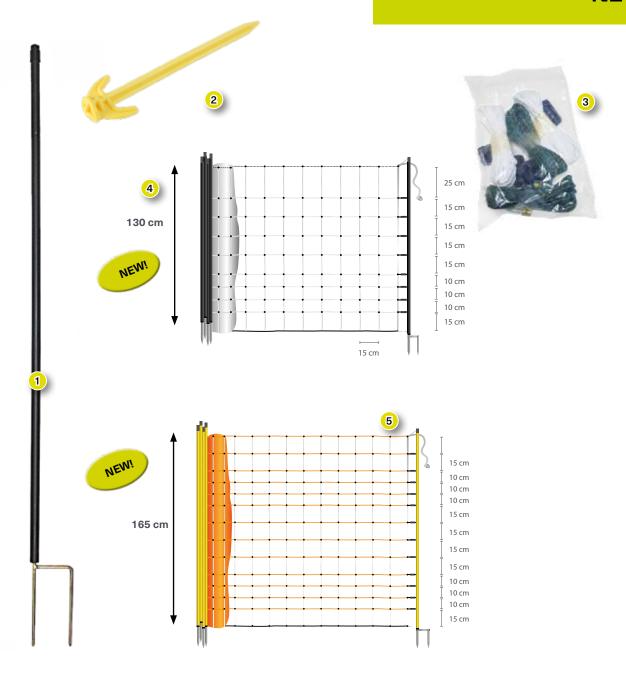
2. Electrified netting for poultry (Green)

Strong poultry net with moulded junctions on 12 horizontal strands. The net is green and supplied with black posts with a single or double spike of 18 cm. The net is 25 or 50 mtr long and 107 cm or 120 cm high. The space between the vertical twines is 7,6 cm.

3. Electrified netting for rabbits (Green)

Rabbit net with moulded junctions on 7 horizontal strands. Supplied with posts with a single spike of 18 cm. The net is 50 mtr long en 50 cm high. The space between the vertical twines is 7,6 cm.

Photo	Art. nr.	Description	PU	€ price/PU
1	162-50000	Sheep net green 50 m long 84 cm high	1	
	162-50000-1	Post extra/exchange for green sheep net	1	
	162-50000-12p	Post, spare, for sheep netting, 2 pins	1	
	162-50000-2p	Sheep net green, 2 pins, 50 m long 84 cm high	1	
	162-50012-2p	Sheep net green, 2 pins, 25 m long 84 cm high	1	
2	162-50002	Poultry net green 50 m long 107 cm high	1	
	162-50009	Poultry net green 25 m long 107 cm high	1	
	162-50002-1	Extra and/or exchange post for green poultry net	1	
	162-50006-2p	Poultry net green, 2 pins, 50 m long 120 cm high	1	
	162-50011-2p	Poultry net green, 2 pins, 25 m long 120 cm high	1	
	162-50011-12p	Post, spare, for poultry netting of 120 cm, 2 pins	1	
3	162-50003	Rabbit net green 50 m long 50 cm high	1	
	162-50010	Rabbit net green 25 m long 50 cm high	1	
	162-50003-1	Extra and/or exchange post for green rabbit net	1	



1. CORNER POST

Special post with double spike for creating strong corners with sheep and poultry netting. 19 mm thick.

2. FIXATION PEG

Additional or replacement

3. REPAIR KIT FOR NETTING

For maintenance and repair of netting. With foot connector, top insulators, wire connectors and single wires.

4.WOLF NETS

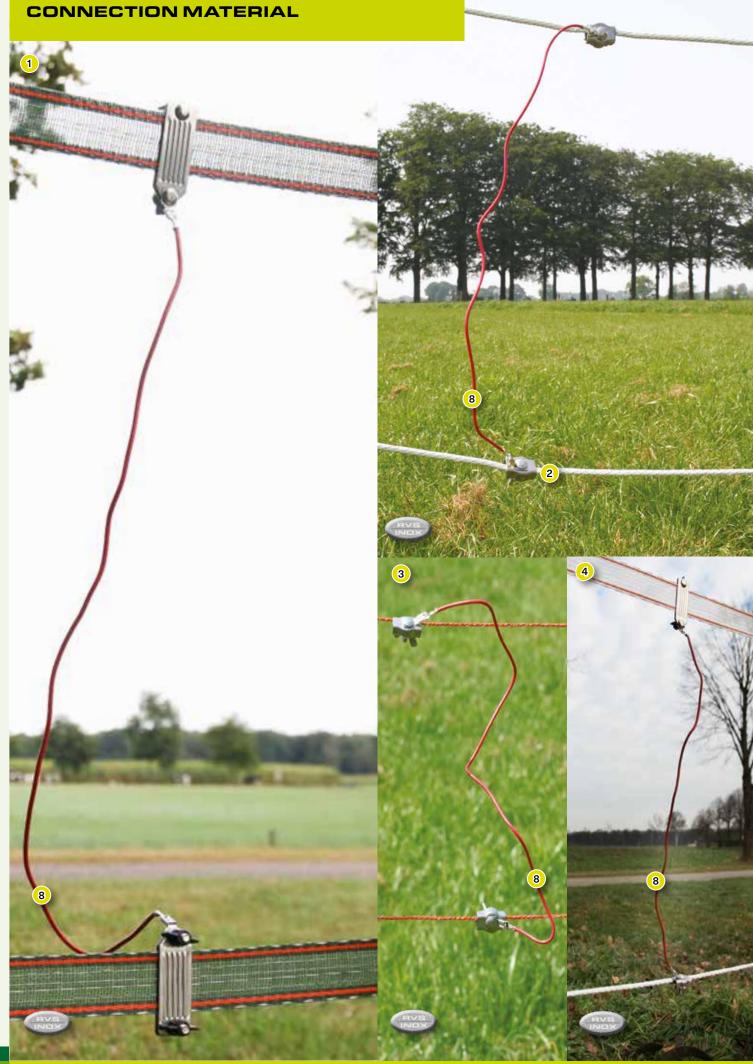
Very strong wolf net with welded wire crossings on 14 horizontal wires with 3*0,2 cond. Stainless steel. Fitted with 14 black stakes and an 18 cm tenon. 50 m long and 130 cm high. Vertical wires are 15 cm apart, horizontal wires 10, 15 & 25 cm apart.

5. NETS FOR WOLVES AND WILDLIFE

Very strong wolf net with welded wire crossings on 14 horizontal wires with 3*0,2 cond. Stainless steel. Fitted with 14 black stakes and an 18 cm pin. 50 m long and 165 cm high. Vertical wires are 15 cm apart, horizontal wires 10 & 15 cm apart.

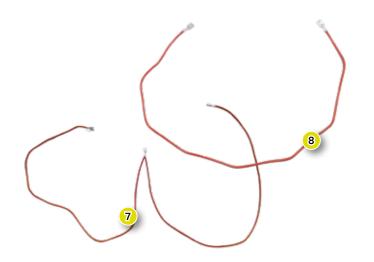
Photo	Art. nr.	Description	PU	€ price/PU
1	162-50004	Corner post for sheep netting, double spike, 19 mm thick	1	
	162-50005	Corner post for poultry netting, double spike, 19 mm thick	1	
2	162-50008	Fixation peg	1	
3	162-50015	Repair kit for netting	1	
4	880 0013-391	Wolf net 130 cm, 50 mtr	1	
5	880 0013-392	Net for wolves and wildlife, 165 cm, 50 mtr	1	

PU=Packing Unit Price incl. VAT



CONNECTION MATERIAL





5

"Cross connections are very important for an optimal working electric fence. By connecting the conductors, like wire or tape, every 200 mtr with each other, you will optimize the tension in your fence system. Good connections can optimize your fence with up to 2,000 Volt."

Photo	Art. nr.	Description	PU	€ price/PU
1	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	
2	162-85604-2	Connection kit, INOX, for rope, with 70 cm long wire	2	
3	162-85605-2	Connection kit, INOX, for wire, with 70 cm long wire	2	
4	162-85601-2	Connection kit, INOX, tape to rope, with 70 cm long wire	2	
5	162-85611-2	Connection kit, zinc plated, for wire and rope with heart shape connectors	2	
6	162-85613-2	Reel cable kit, connecting conductors to main fence	2	
7	162-85614-2	Connection cable, 3-way, HT 60 cm	2	
8	162-85615-2	Connection cable, single, HT 60 cm	2	

PU=Packing Unit Price incl. VAT



Photo	Art. nr.	Description	PU	€ price/PU
1	162-39096-4	Connectors for wire up to 4 mm, galvanized, with wing nuts	4	
	162-39099-4	Connectors for wire up to 4 mm, INOX, with wing nuts	4	
2	162-39097-4	Connectors for rope up to 8 mm, galvanized, with wing nuts	4	
	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
	162-39088	Connector for rope up to 10 mm, INOX, with M6 nuts	1	
3	162-39091-4	Connectors, single for wire up to 4 mm, galvanized with wing nuts	4	
	162-39092-4	Connectors, single for rope up to 8 mm, galvanized with wing nuts	4	
4	162-39093-4	Connectors, single for wire up to 4 mm, INOX, with wing nuts and connection tab	4	
	162-39094-4	Connectors, single for rope up to 8 mm, INOX, with wing nuts and connection tab	4	
5	162-39079-4	Connectors, galvanised, single for 8 - 10 mm, per 4	4	
6	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	4	
7	162-39034-4	Wire connectors for thin wire	4	
8	162-85479-3	Wire connector for steel wire 1.8 - 2.5 mm	3	
9	162-85483-4	L-Wire clamp, per 4 pieces	4	
10	162-85484-4	O-Wire clamp, per 4 pieces	4	
11	162-85485-4	W-wire clamp, per 4 pieces	4	











"Prevent sparking and loss of tension at connection points in your fence by using decent connectors and connection kits."

Photo	Art. nr.	Description	PU	€ price/PU
1	162-80142-4	Connectors, INOX, for tape up to 50 mm	4	
2	162-39095-10	Connectors for tape up to 40 mm, INOX	10	
	162-39095-4	Connectors for tape up to 40 mm, galvanized	4	
3	162-39090-10	Connectors, aluminium, for tape up to 20 mm	10	
	162-39090-4	Connectors, aluminium, for tape up to 20 mm	4	
4	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	2	
5	162-39400-4	Tape connection plates, seperate, 4 pcs, excl. Connection leads	4	

PU=Packing Unit Price incl. VAT

RING INSULATORS

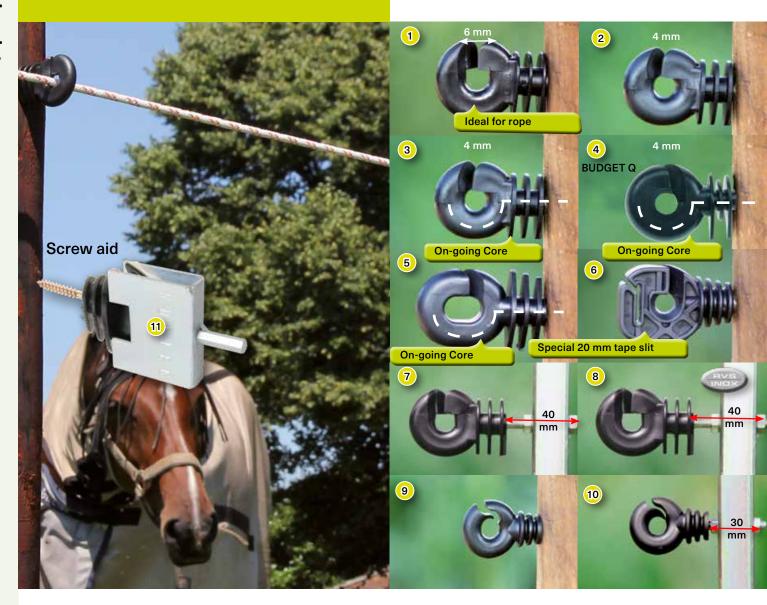


Photo	Art. nr.	Description	PU	€ price/PU
1	162-80170-25	Ring insulators KOLTEC, bag	25	
	162-80170-100	Ring insulators KOLTEC, in bucket	100	
	162-80170-200	Ring insulators KOLTEC, in bucket	200	
2	162-80085-25	Ring insulators, standard	25	
	162-80085-100	Ring insulators standard, bucket	100	
3	162-80086-25	Ring insulators with iron core	25	
	162-80086-100	Ring insulators with iron core, bucket	100	
	162-80086-200	Ring insulators with iron core, bucket	200	
4	162-80174-50	Ring insulators with iron core, for wooden posts 50 pieces	50	
	162-80174-250	Ring insulators with iron core, for wooden posts, bucket 250 pieces	250	
5	162-80096-25	Ring insulators, solid and oval, in bag	25	
	162-80096-100	Ring insulators, solid and oval, in bucket	100	
6	162-80072-25	Ring insulators for rope, can be combined with tape up to 20 mm	25	
7	162-80095-25	Ring insulators with M6 on metal posts, incl. 2 nuts	25	
8	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
9	162-80088-25	Ring insulators, small for wooden constructions	25	
10	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	
11	162-85480	Screw aid KOLTEC, metal, for KOLTEC tape and ring insulators	1	

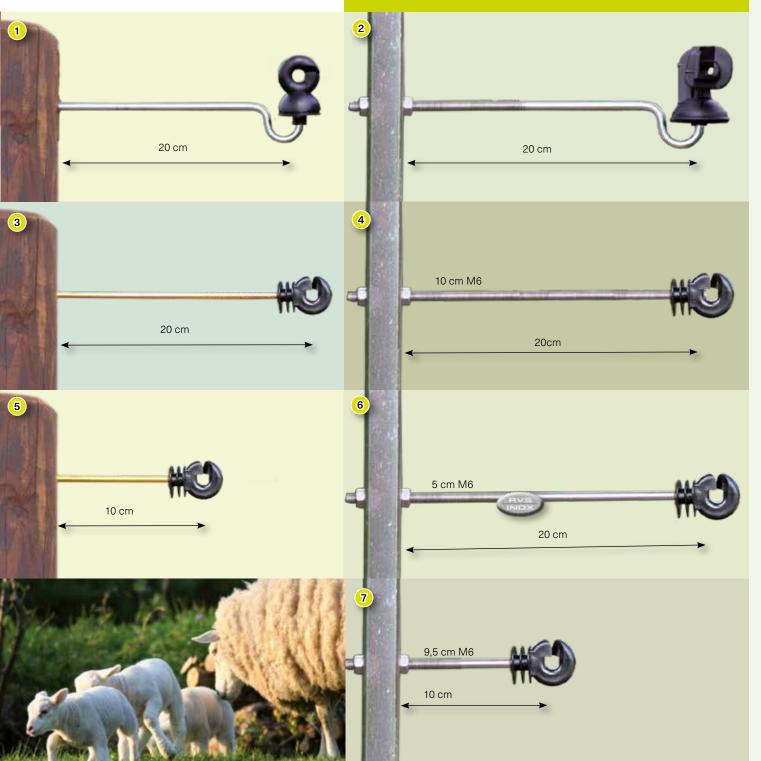


Photo	Art. nr.	Description	PU	€ price/PU
1	162-80087-10	Offset ring insulators 20 cm for wire on wooden posts	10	
2	162-80098-10	Offset insulators 20 cm of which 15 cm M6, for rope up to 8 mm on metal posts	10	
3	162-80503-10	Offset ring insulators, 20 cm for wire/rope on wooden posts	10	
4	162-80093-10	Offset ring insulators 20 cm for wire with M6 on metal posts	10	
5	162-80505-20	Ring insulators special, half long 10 cm, for wooden posts	20	
	162-80505-100	Ring insulators special, half long 10 cm, for wooden posts	100	
6	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
7	162-80508-10	Ring insulator, half long/10 cm with M6	10	









Photo	Art. nr.	Description	PU	€ price/PU
1	162-80185-100	Hook-ring insulators, short, for wooden posts, in bucket	100	
	162-80185-25	Hook-ring insulators, short, for wooden posts	25	
2	162-85472	Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators	1	
3	162-80081-25	W-insulators, black, strong insulators for wire and rope	25	
	162-80081-100	W-insulators, black, in bucket, strong insulators for wire and rope	100	
4	162-80166-10	Pin lock insulator, heavy duty 10 pieces	10	
5	162-80043-25	Saddle/nail insulators (small) with nail	25	
6	162-80073-25	Nail insulators KOLTEC	25	
7	162-80180-25	W-insulators, white, bag with 4 pcs strong insulators for wire and rope	25	
	162-80180-100	W-insulators, white, in bucket, strong insulators for wire and rope	100	
8	131-15182-200	Woodscrew, 4,5* 35 mm PZ-2 panh., galv.	200	
9	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	



7

















Photo	Art. nr.	Description	PU	€ price/PU
1	162-80061-25	Ring insulators, klemmfix for oval spring steel posts	25	
2	162-80048-25	Insulators for oval posts for tape up to 20 mm	25	
3	162-80015	Side pigtail insulator, for oval spring steel posts	1	
4	162-80210-25	Click insulators, black, for wire and tape up to 20 mm on round ø 10 mm posts	25	
5	162-80065-10	Post insulators for wire/rope for posts up to ø 15 mm	10	
	162-80065-100	Post insulators for wire/rope for posts up to ø 15 mm	100	
6	162-80011-10	Post insulators for ø 20 mm posts for wire and rope up to 6 mm	10	
7	162-80066-10	Post insulators for tape up to 40 mm for round post up to ø 15 mm	10	
8	162-80038-4	Split insulators for angle iron post	4	
9	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
	162-80063-4	Click insulators, black, for posts of ø 6 mm	4	
	162-80009-25	Click insulators, red, for ø 12 mm posts	25	
	162-80010-25	Click insulators, yellow, for ø 10 mm posts	25	

PU=Packing Unit Price incl. VAT

START INSULATORS



3 2



EGG INSULATOR

EGG INSULATOR
Egg insulator without or with 1 or 2 hooks and screw eye. Designed for end postsand corners. The egg-shape insulator is extremely solid and especially suitable for aluminum and (high tensile) steel wire. Ideal for fast mounting and a professional finishing look. Hook and screw eye are zinc plated, but also available in INOX. In black or white.



Several handy combinations are possible with various wire tensioners and tension springs. **See page 103.**



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80077-4	Egg-insulators, black, without hooks in package	4	
	162-80077-100	Egg-insulators, black, bucket with 100	100	
	162-80076-4	Egg-insulators, white, bags of 4	4	
	162-80076-100	Egg-insulators, white, bucket with 100	100	
2	162-70500	Egg-insulator, black, with 1 hook, single	1	
	162-70600	Egg-insulator, white, with 1 hook, single	1	
3	162-70504	Egg-insulator, black, with 1 INOX hook, single	1	
	162-70604	Egg-insulator, white, with 1 INOX hook, single	1	
4	162-70500-4	Egg-insulators, black, with 1 hook and screw eye	4	
	162-70500-50	Egg-insulators, black, with 1 hook and screw eye (50 pc)	50	
	162-70600-4	Egg-insulators, white, with 1 hook and screw eye	4	
	162-70600-50	Egg-insulators, white, with 1 hook and screw eye (50 pc)	50	
5	162-70504-4	Egg-insulators, black, with 1 INOX hook and INOX screw eye	4	
	162-70504-50	Egg-insulators, black, with 1 INOX hook and INOX screw eye	50	
	162-70604-4	Egg-insulators, white, with 1 INOX hook and INOX screw eye	4	
	162-70604-50	Egg-insulators, white, with 1 inox hook and inox screw eye (50 pc)	50	
6	162-70501	Egg-insulator, black, with two hooks, single	1	
	162-70601	Egg-insulator, white, with two hooks, single	1	
7	162-70506	Egg-insulator, black, with two INOX hooks, single	1	
	162-70606	Egg-insulator, white, with two INOX hooks, single	1	
8	136-60261	Screw eye galvanized for wooden posts	1	
9	136-60262	Screw eye, INOX for wooden posts	1	
10	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80070-10	Corner insulators of porcelain, for wire and rope	10	
2	162-80071-25	Corner insulators, white plastic, for wire and rope	25	
	162-80071-4	Corner insulators, white plastic, for wire and rope	4	
3	162-80119-25	Corner insulators, black plastic, for wire and rope	25	
	162-80119-4	Corner insulators, black plastic, for wire and rope	4	
4	162-80075-4	Corner roll insulators for wire and rope for wooden posts	4	
	162-80187-4	Corner roll insulators for rope and wire for wooden posts, INOX	4	
5	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
6	162-80171-3	Corner roller, synthetic for wire	3	
7	162-80152-8	Insulation tubes, synthetic with iron inlay, 60 cm long, for max. 3 mm wire	8	

TAPE INSULATORS



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80400-25	Tape insulators KOLTEC, short for wooden posts per bag	25	
	162-80400-100	Tape insulators KOLTEC, short for wooden posts in bucket	100	
2	162-80401-10	Offset tape insulator KOLTEC, 22 cm, for wooden posts	10	
3	162-80402-25	Tape insulators KOLTEC, short with complete M6 thread shaft, for metal posts	25	
4	162-80403-10	Offset tape insulator KOLTEC, 22 cm with 15 cm M6 thread incl. nuts for metal posts	10	
5	162-85480	Screw aid KOLTEC, metal, for KOLTEC tape and ring insulators	1	





Photo	Art. nr.	Description	PU	€ price/PU
1	162-80100-25	Insulators KOLTEC for tape up to 40 mm	25	
	162-80100-100	Insulators KOLTEC for tape up to 40 mm, in bucket	100	
2	162-80060-25	Insulators sturdy and large for tape up to 40 mm and rope up to 6 mm	25	
	162-80060-100	Insulators sturdy and large for tape up to 40 mm and rope up to 6 mm	100	
3	162-80072-25	Ring insulators for rope, can be combined with tape up to 20 mm	25	
4	162-80173-3	Tape strainer, synthetic	3	
5	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
6	162-80046-4	In-between/corner insulators with rubber inlay to fixate tape	4	
	162-80046-50	In-between/corner insulators with rubber inlay to fixate tape	50	
7	131-15181-200	Woodscrew, 5,0 * 45 mm PZ-2 con, galv.	200	
8	131-15182-200	Woodscrew, 4,5* 35 mm PZ-2 panh., galv.	200	
9	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	
10	162-80404-25	Inbetween insulator for tape, bag with 25 pcs	25	
	162-80404-100	Inbetween insulator for tape, bucket with 100 pcs	100	

CORNER INSULATORS



Use this insulator in corners and every 50 à 60 mtr as an

in-between insulator. In this

way it is easy to built a tight strained tape fence and to

keep it strained.

Robust starter / corner insulator for solid start and corner joints to tension the tape. The teeth on the inside ensure that the tape is tensile in

With the help of the stainless steel / INOX insert plate you can easily place a gate handle at a

You can also use the stainless steel / INOX insert plate to make very simple intermediate connections for the creation of multiple pastures. The insert plate provides an optimal contact surface for a good connection of all current conductors in the tape.

















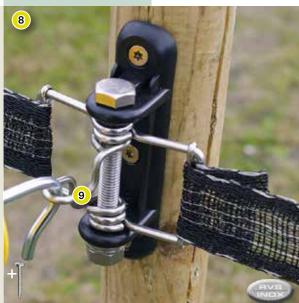
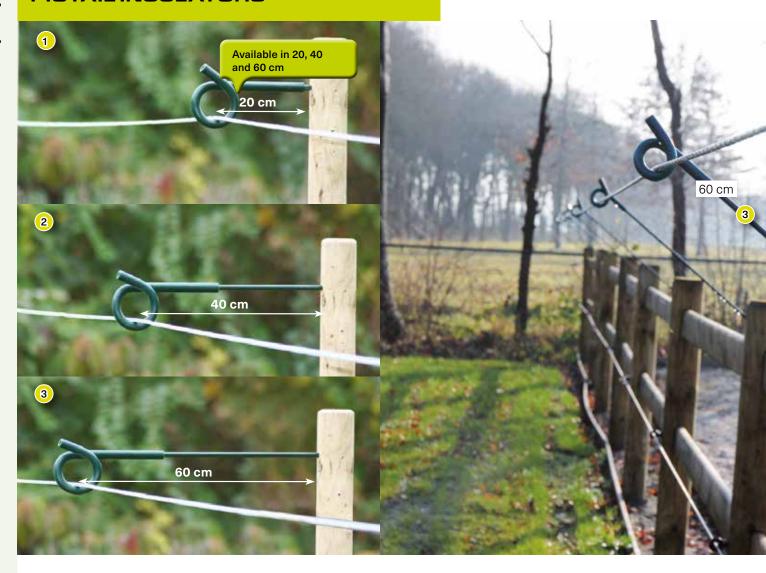


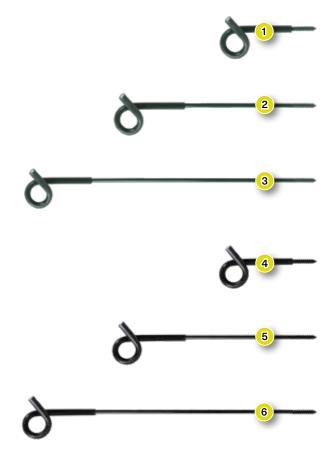




Photo	Art. nr.	Description	PU	€ price/PU
1	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
2	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
3	136-80046	Connection and anchor plate for 162-80068 & 162-80046 tape insulator	1	
	162-80069-4	Connection and anchor plate for 162-80068 & 162-80046 tape insulator (4 pcs)	4	
4	162-80046-4	In-between/corner insulators with rubber inlay to fixate tape	4	
	162-80046-50	In-between/corner insulators with rubber inlay to fixate tape	50	
5	162-80120-4	Corner/start insulators for tape, with metal brackets for max. contact	4	
6	162-80172-4	Corner insulator for tape, with strain handles, 4 pieces	4	
7	162-80173-3	Tape strainer, synthetic	3	
8	162-80177-2	Double tape gate handle anchor	2	
9	162-80178-4	Gate handle anchors buckles for 162-80172-4	4	
10	131-15181-200	Woodscrew, 5,0 * 45 mm PZ-2 con, galv.	200	

PIGTAIL INSULATORS







PIGTAIL INSULATORS



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80123	Offset pigtail insulator, green, 20 cm 8 mm, for wooden posts	1	
2	162-80113	Offset pigtail insulator, green, 40 cm 8 mm, for wooden posts	1	
3	162-80126	Offset pigtail insulator, green, 60 cm 8 mm, for wooden posts	1	
4	162-80123-zw	Offset pigtail insulator, black, 20 cm 8 mm, for wooden posts	1	
5	162-80113-zw	Offset pigtail insulator, black, 40 cm 8 mm, for wooden posts	1	
6	162-80126-zw	Offset pigtail insulator, black, 60 cm 8 mm, for wooden posts	1	
7	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
	162-80115-25	Click insulators, black, for posts of ø 8 mm	25	

PU=Packing Unit Price incl. VAT

GAUZE & BEKAERT FENCES



Plastic insulators which take care that animals don't spoil your nice gauze fence. These insulators are suitable for e.g. Bekaert



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80055	Offset insulator 25 cm for tape on round posts Ø 48 mm	1	
	162-80056	Offset insulator 25 cm for tape on round posts Ø 60 mm	1	
2	162-80132	Insulator, synthetic for tape, for round ø 48 mm posts	1	
	162-80133	Insulator, synthetic for tape, for round ø 60 mm posts	1	
3	162-80130	Insulator, synthetic for wire/rope, for round ø 48 mm posts	1	
	162-80131	Insulator, synthetic for wire/rope, for round ø 60 mm posts	1	
4	162-80089	Offset insulator 25 cm for rope/wire, for round posts of ø 48 mm	1	
	162-80090	Offset insulator 25cm for rope/wire on round posts Ø 60 mm	1	
5	162-80134	Insulator, synthetic for wire/rope, for posts of 60*40 mm	1	
6	162-80135	Offset insulator, synthetic for wire/rope, for posts of 60*40 mm	1	
7	162-80136	Insulator, synthetic for tape, for posts of 60*40 mm	1	
8	162-80137	Offset insulator, synthetic for tape, for posts of 60*40 mm	1	
9	162-80050	Offset insulator 25cm for rope/wire, with tieraps	1	
10	162-80161	Fencerail clamp top insulator for 6 mm	1	
	162-80162	Fencerail clamp top insulator for 8 mm	1	

GAUZE & BEKAERT FENCES





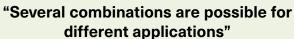
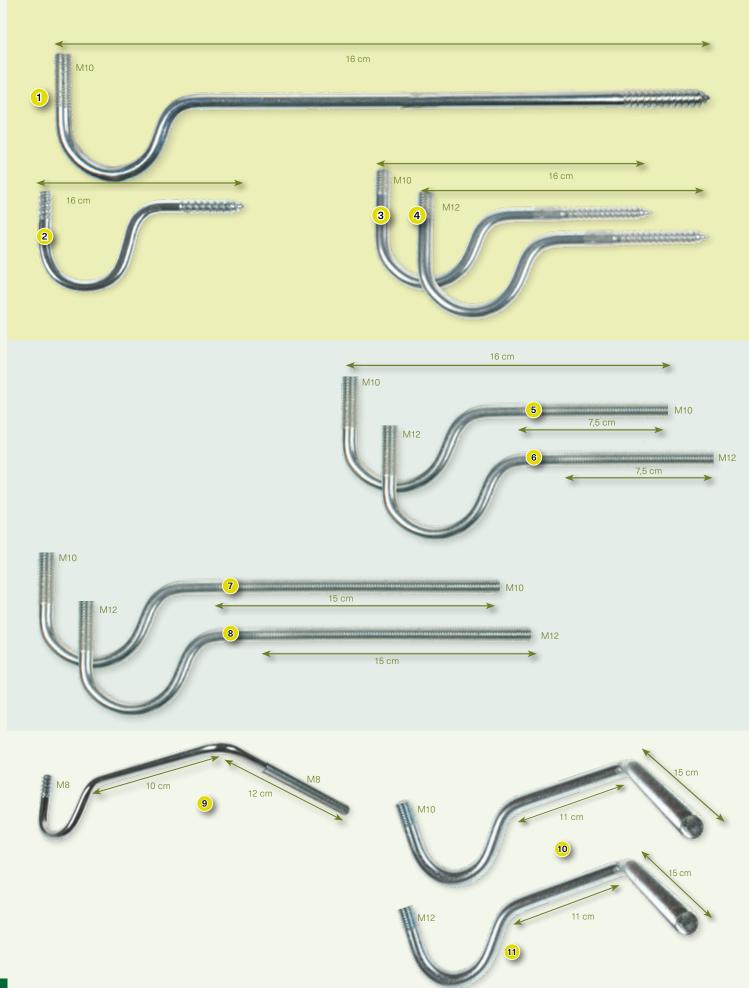




Photo	Art. nr.	Description	PU	€ price/PU
1	162-80067	Fencerail clamp insulator	1	
2	162-80018	Offset insulator, plastic, 30 cm, for wire and rope, for gauze fences	1	
3	162-80097	Bracket, INOX, for post 30-60 mm, with M6 and M8 thread	1	
4	162-80138-4	Post terminals, synthetic with INOX bracket and nut, for 40*40 mm posts	4	
	162-80139-4	Post terminals, synthetic with INOX bracket and nut, for 60*60 mm posts	4	
5	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
6	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
	162-80508-10	Ring insulator, half long/10 cm with M6, incl. INOX nuts, for metal posts	10	
7	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
8	162-70510-4	Egg-insulators with INOX hook and screw eye M8 (80 mm)	4	
9	162-79084-4	Gate handle anchors KOLTEC, 3-way, INOX, for metal posts M6	4	
10	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	



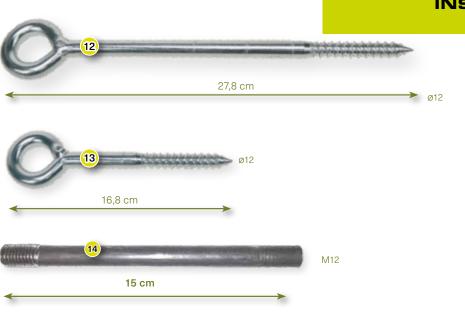












Photo	Art. nr.	Description	PU	€ price/PU
1	162-65002-50	Insulator brackets (swan neck long 35,5 cm) with M10 thread, for wooden posts	50	
2	162-65013-25	Insulator brackets (swan neck short) 8 mm, for wooden posts	25	
3	162-65001-50	Insulator brackets (swan neck short) with M10 thread, for wooden posts	50	
4	162-65003-50	Insulator brackets (swan neck short) with M12 thread, for wooden posts	50	
5	162-65025-50	Insulator brackets (swan neck short) with M10 thread incl. nuts, for concrete posts	50	
6	162-65026-50	Insulator brackets (swan neck short) with M12 thread incl. nuts, for concrete posts	50	
7	162-65004-50	Insulator brackets (swan neck long 25cm) with M10 thread incl. nuts, for concrete post	s 50	
8	162-65006-50	Insulator brackets (swan neck long 25cm) with M12 thread incl. nuts, for concrete posts	50	
9	162-65014-25	Insulator brackets (swan neck hooked) 8 mm with M8 thread + nuts, for concrete posts	25	
10	162-65005-50	Insulator brackets (swan neck hooked), with M10 thread incl. nuts, for concrete posts	50	
11	162-65018-50	Insulator brackets (swan neck hooked), with M12 thread incl. nuts, for concrete posts	50	
12	162-65015	Screw eye, Ø 12 mm 278 mm long with wood thread	1	
13	162-65016	Screw eye, Ø 12 mm 168 mm long with wood thread	1	
14	162-65008	Weld rod with M12 thread	1	
15	162-65017	Thread bar M12, 25 cm incl. 2 nuts	1	
16	131-14091	Ring nut, M12	1	
17	162-65000-50	Insulator brackets (straight) with M10 thread, for wooden posts	50	
			PU=Packing Unit Pr	ice incl VAT

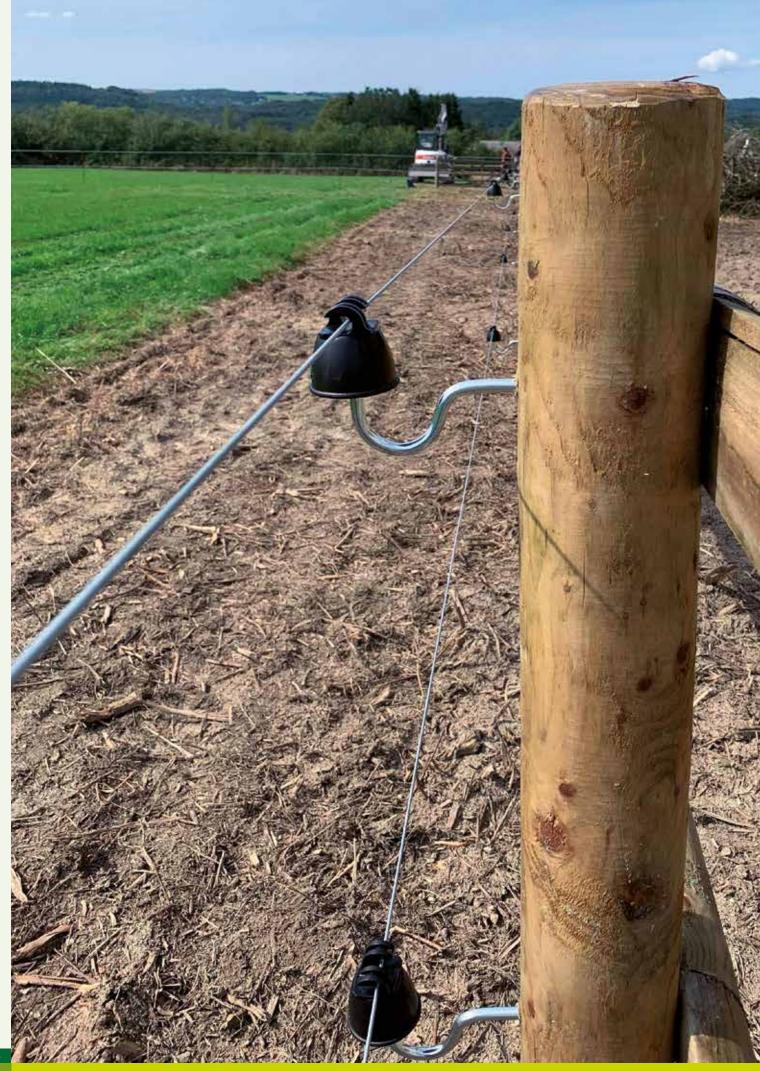
















Photo	Art. nr.	Description	PU	€ price/PU
1	162-79700-25	W-skirt insulator M8/M10/M12	25	, p
2	162-80035-25	W-skirt insulators, large, black, incl. short 8 mm bracket for wooden posts	25	
	162-79800-25	, , ,	25	
3	102-79800-25	Tape insulator for brachets of/with 8mm/M10/M12 thread		
4	162-79900-25	Tape insulator for brachets of/with 8mm/M10/M12 thread, with 8mm brackets	25	
5	162-80040-25	Screw cap insulators, black screw cap, for M8, M10 and M12 thread	25	
6	162-80042-25	Screw cap insulators, red screw cap, for M8, M10 and M12 thread	25	
7	162-80044-25	Screw cap insulators, yellow screw cap, for M8, M10 and M12 thread	25	
8	162-80039-25	Screw cap insulators, large, black, incl. short 8 mm bracket for wooden posts	25	
9	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
10	162-80054-G100	Dump insulators KOLTEC, complete yellow, for M10 and M12 thread	100	
11	162-80054-Z100	Dump insulators KOLTEC, complete black, for M10 and M12 thread	100	
12	162-65022-25	Caps, separate, black, for KOLTEC Dump insulator end large screw cap insulator	25	
13	162-65023-25	Caps, separate, yellow, for KOLTEC Dump insulator end large screw cap insulator	25	
14	162-65024-25	Caps, separate,red, for KOLTEC Dump insulator end large screw cap insulator	25	

Install your gate so that there is only tension when it is closed by the gate handle anchor, which is under tension) en is tension free when it is opened.

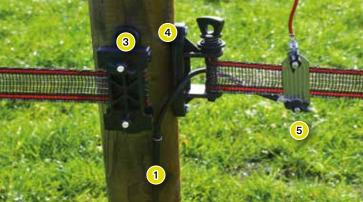
Advantages of this way are:

- No loss of tension on your fence by on the ground lying gate handles.
- When passing the gate you have no shock effects by on the ground
- No shock effect when your animal while passing stands on the current conductor of your gate.

ADVICE GATE CONSTRUCTION FOR TAPE







If you build your gate with springs, tape or rope, make sure that these get no tension anymore after opening the gate. Otherwise they lay on the ground sparking and short cut your electric fence.

To build this in a good way connect only the gate handle side of the gate with the rest of your application. Due to the underground connection,

the date is not a part of the circuit and it is always safe to open the date without cutting off the rest of the circuit

Photo	Art. nr.	Description	PU	€ price/PU
1	133-36122-10	High tension cable, coil with 10 m, flexible 7 strand inox core	10	
2	162-79010-2	Gate handle, black with fixed tape clamp, per 2 pieces	1	
3	162-80068-4	Insulators for tape, solid corner or in between insulators	4	
4	162-80173-3	Tape strainer, synthetic	2	
5	162-85603-2	Connection kit, INOX, for tape, with 70 cm long wire	2	
	162-85612-2	Connection kit for tape/HT-cable, with ring and connection eye	2	
6	162-39089-4	Clamps for connecting iron-aluminium- and steel wire	2	
7	136-80046	Connection and anchor plate for 162-80068 & 162-80046 tape insulator	1	
	162-80069-4	Connection and anchor plate for 162-80068 & 162-80046 tape insulator (4 pcs)	4	



"If both sides of the gate are connected with each other, the circuit in your application is always complete. The electric fence circuit will not be cut off by opening the gate, when this gate is part of the circuit."

ADVICE GATE CONSTRUCTION FOR ROPE



Photo	Art. nr.	Description	PU	€ price/PU
1	133-36122-10	High tension cable, coil with 10 m, flexible 7 strand inox core	10	
2	162-39098-4	Connectors for rope up to 8 mm, INOX, with wing nuts	4	
3	162-70504-4	Egg-insulators with 1 INOX hook and INOX screw eye	4	
4	162-80002	Gate kit for rope, INOX, variable wideness	1	
5	162-80167-4	Pin lock insulator, with gate handle anchor and connection nut	4	
6	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
7	162-85604-2	Connection kit, INOX, for rope, with 70 cm long wire	2	

PU=Packing Unit Price incl. VAT





Be aware that you buy the real **KOLTEC** gate handle. Our logo on the product will guarantee this.

- insulation is ensured, even after years of use.
- **UV-radiation resistant.**
- Strong spring for a tight gate closure.
- Strong construction for long term durable use.

Photo	Art. nr.	Description	PU	€ price/PU
1	162-79037	Gate handle, KOLTEC, brown INOX	1	
2	162-79036	Gate handle, KOLTEC, brown	1	
3	162-79033	Gate handle, KOLTEC, neon yellow	1	
	162-79033-4	Gate handles, KOLTEC, neon yellow, package of 4	4	
4	162-79034	Gate handle, KOLTEC, neon green	1	
	162-79034-4	Gate handles, KOLTEC, neon green, package of 4	4	
5	162-79035	Gate handle, KOLTEC, neon violet	1	
	162-79035-4	Gate handles, KOLTEC, neon violet, package of 4	4	
6	162-80020	Gate handles KOLTEC, black	1	
7	162-80019	Gate handle KOLTEC, black, INOX	1	
8	162-79030	Gate handle, KOLTEC, red	1	
9	162-79031	Gate handle, KOLTEC, red INOX	1	
10	162-79020	Gate handle, KOLTEC, yellow	1	
11	162-79038	Gate handle KOLTEC, white	1	
12	162-79039	Gate handle KOLTEC, white INOX	1	
13	162-80029	Gate handle, black, budget, separate	1	
14	162-79010-2	Gate handle, black with fixed tape clamp, per 2 pieces	2	
15	162-79011-2	Gate handle, white with fixed tape clamp, per 2 pieces	2	
16	162-80023-2	Gate handles KOLTEC, black, with tape connectors	2	
17	162-80143-2	Gate handle plates, INOX, for connecting tape up to 50 mm to a gate handle	2	
		DIL	-Dooking Unit Dr	ing ingl VAT

PU=Packing Unit Price incl. VAT

GATE HANDLE ANCHORS















+= Incl. / Inkl.

Photo	Art. nr.	Description	PU	€ price/PU
1	162-80079-4	Gate handle anchors	4	
	162-80079-10	Gate handle anchors	10	
2	162-79040-4	Gate handle anchors, INOX	4	
3	162-79045-4	Gate handle anchors with M6 thread incl. 2 nuts	4	
4	162-80177-2	Double tape gate handle anchor	2	
5	162-80080-2	Gate handle anchors kit, with 2 gate handle anchors and 3 tape connectors	2	
6	162-80167-4	Pin lock insulator, with gate handle anchor and connection nut	4	
7	162-80069-2	Strain/corner insulators, very strong with INOX plate	2	
8	136-80046	Connection and anchor plate for 162-80068 & 162-80046 tape insulator	1	
	162-80069-4	Connection and anchor plate for 162-80068 & 162-80046 tape insulator	4	





Koltec has developed two new types of the gate handle anchors which make it easy to assemble. Very strong, without turning parts. The gate handle anchor is made in a way that animals can't injure themselves to this insulator. The two way is ideal for gate closures. The three-way is ideal to make splittings and compartments. These gate handle anchors are available in a galvanized and in an INOX version. Packed per 4.

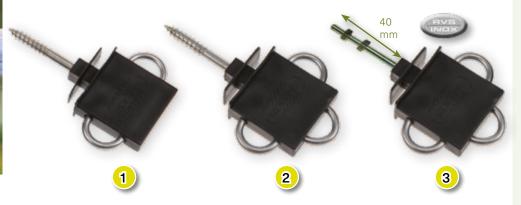


Photo	Art. nr.	Description	PU	€ price/PU
1	162-79079-4	Gate handle anchors KOLTEC, 2-way, galvanized	4	
	162-79080-4	Gate handle anchors KOLTEC, 2-way, INOX	4	
2	162-79081-4	Gate handle anchors KOLTEC, 3-way, galvanized	4	
	162-79082-4	Gate handle anchors KOLTEC, 3-way, INOX	4	
3	162-79083-4	Gate handle anchors KOLTEC, 3-way, galvanized, for metal posts M6	4	
	162-79084-4	Gate handle anchors KOLTEC, 3-way, INOX, for metal posts M6	4	

PU=Packing Unit Price incl. VAT

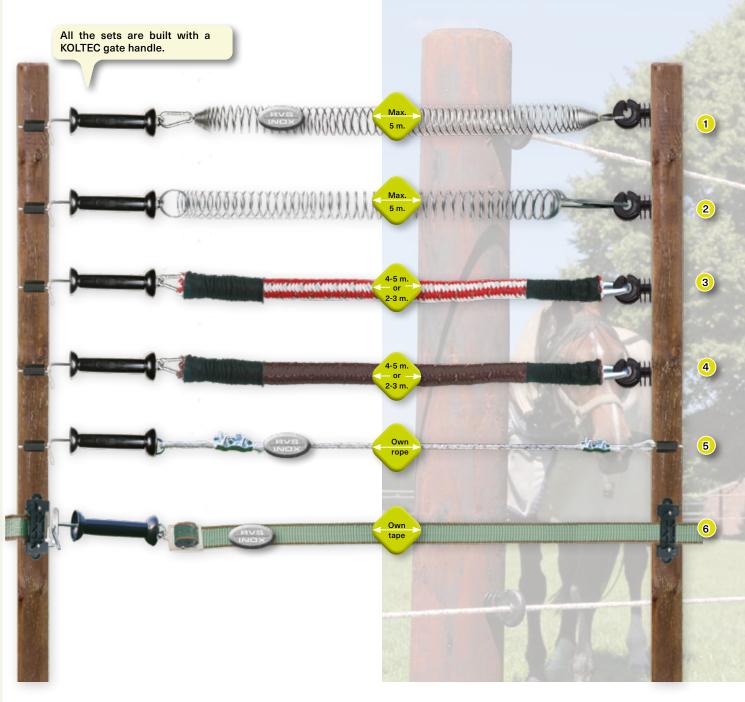


Photo	Art. nr.	Description	PU	€ price/PU
1	162-80041	Gate kit, INOX, with spring. Not suitable for horses	1	
2	162-80004	Gate kit with spring, galvanized, not suitable for horses	1	
3	137-80025	Cable 4 -5 m red /white, elastic, separate	1	
	162-80025	Gate kit, elastic cable, red/white, for gates up to 5 mtr, incl. gate handles and insulators	1	
	137-80026	Cable 2 -3 m red /white, elastic, separate	1	
	162-80026	Gate kit, elastic cable, red/white, for gates up to 3 mtr, incl. gate handles and insulators	1	
4	137-80008	Cable 2 -3 m, brown, elastic, separate	1	
	162-80008	Gate kit, elastic, brown, for gates from 2 - 3 mtr	1	
	137-80014	Cable 4 -5 m brown, elastic, separate	1	
	162-80014	Gate kit, elastic, brown, for gates from 4-5 mtr	1	
5	162-80002	Gate kit for rope, INOX, variable wideness	1	
6	162-80003	Gate kit for tape, INOX, variable wideness	1	



Photo	Art. nr.	Description	PU	€ price/PU
1	162-79990	Elastic rope kit for 4,5 m, 10 mm brown INOX	1	
	162-79990-100	Elastic rope, 10 mm brown	100	
2	162-79991	Elastic rope kit for 4,5 m, 10 mm white INOX	1	
	162-79991-100	Elastic rope, 10 mm white	100	
3	162-80007	Gate kit with elastic rope and 2 gate handles for gates up to 2 m	1	
4	162-80001	Gate kit with elastic rope, for gates up to 6 mtr	1	
5	162-80001-50	Rope elastic on a 50 m coil	50	
6	162-80001-25	Rope elastic on a 25 m coil	25	
7	162-79998	Gate set, elastic rope, brown/red, for gates up to max. 6 m	1	
8	162-79998-25	Rope, elastic, brown/red, coil with 25 m	25	
9	162-80001-2mn	Mounting kit for elastic rope	2	
10	162-79990-2mn	Mounting kit for elastic rope	2	







Photo	Art. nr.	Description	PU	€ price/PU
1	162-85463	Rollgate with white tape, unwinnable up to 6 mtr	1	
	162-85468	Rollgate with black tape, unwinnable up to 6 mtr	1	
2	162-80024	Gate handle KOLTEC, black with spring	1	
3	136-60258	Spring (single)	1	
4	136-60263	Spring (single) INOX	1	

PU=Packing Unit Price incl. VAT

STRAINERS



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80146-4	Rotor strainers for wire and rope 4 pcs	4	
	162-80146-50	Rotor strainers for wire and rope 50 pcs	50	
2	162-80147	Strain handle for rotor strainer	1	
3	162-80154	Strain handle for ratchet strainers	1	
4	162-80140	Ratchet strainer, solid for aluminium and steel wire	1	
5	162-80148	Ratchet strainer, solid with integrated insulator, for wire	1	
6	162-80156-2	Straining set, INOX, for rope, with hook and screw eyes	2	
	162-80160-2	Straining set, INOX, for rope, with hook and screw eyes	2	
7	162-80173-3	Tape strainer, synthetic	3	
8	162-80144	Wire strainer, small, galvanized, 10 cm long and 3 cm wide (nr.2)	1	
9	162-80145	Wire strainer, large, galvanized, 13 cm long and 5 cm wide (nr.4)	1	
10	162-80176-2	Wire strainer for thin synthetic wire	2	
11	162-80150-wit	Strainer reinforced, synthetic, white, for wire	1	
	162-80150-2wt	Strainer reinforced, synthetic, white, for wire, package of 2	2	
12	162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
			DI D 11 11 11 11 D	· · · · · · · · · · · · · · · · · · ·

STRAINERS & SPRINGS

Use the large spring sets for quick and easy installation of steel, galvanized and aluminum wire. They are equipped with an egg insulator with hook, tension spring and optionally with cogwheel tensioner. Available in stainless steel or galvanized steel.

Use the small spring sets for aluminum and plastic wire. The springs are of course also available separately





Photo	Art. nr.	Description	PU	€ price/PU
1	162-70505	Strain set, INOX, egg-insulator, black, with hook, spring and ratchet strainer	1	
	162-70605	Strain set, INOX, egg-insulator, white, with hook, spring and ratchet strainer	1	
2	162-70503	Strain set, egg-insulator, black, with hook, spring and ratchet strainer	1	
	162-70603	Strain set, egg-insulator, white, with hook, spring and ratchet strainer	1	
3	162-70507	Strain set, INOX, egg-insulator, black, with INOX hook and INOX strain spring	1	
	162-70607	Strain set, INOX, egg-insulator, white, with INOX hook and INOX strain spring	1	
4	162-70502	Strain set, egg-insulator, black, with hook and strain spring	1	
5	162-70602	Strain set, egg-insulator, white, with hook and strain spring	1	
6	162-70508	Strain set with strainer, egg-insulator, black, with INOX hooks and small spring	1	
	162-70608	Strain set with strainer, white egg-insulator, white, with INOX hooks and small spring	1	
7	162-70509	Strain set with strainer, egg-insulator, black, with galvanized hooks and small spring	1	
8	162-70609	Strain set with strainer, white egg-insulator, white, with galvanized hooks and small spring	1	
9	162-80149-rvs	Straining spring, large, INOX, for steel wire	1	
10	162-80149	Straining spring, large, galvanized, for steel wire	1	
11	162-80151	Straining spring, small, INOX, for thin metal wire and rope	1	
12	162-80155	Straining spring, small, galvanized, for thin metal wire and rope	1	
13	136-60261	Screw eye galvanized for wooden posts	1	
	136-60262	Screw eye, INOX for wooden posts	1	
14	136-60264	Screw eye, INOX, for metal posts, 80 mm M8	1	



KOLTEC has various reel systems in its range. The larger hand reels are suitable for wire, rope and tape. View the table for more information about the capacity.

Separate reels and mounting brackets are available for almost all reels.

1. LARGE REEL

Ideal large reel with mounting frame to mount on a mounting post without accessories. The reel is supplied with a locking ratchet and an adjustable break.

3. REEL

Spare coil for large reels.

4. LARGE REEL WITH 1:3 GEAR RATIO AND WIRE DIVIDER

Handy reel with gear and an automatic wire-divider. The divider ensures optimum filling of the spool and better use of maximum capacity. Also fitted with a switch to switch the power on and off on the spool. It can spool 75 m of 40 mm ribbon up to 1,500 m of thin wire.

5. LARGE REEL WITH STRAP

Handy reel with locking ratchet and supplied with strap, which makes it easy to carry when spooling the wire, rope or tape.

Reel	Art.Nr.			Indication
Conductor	Mtr's	162-39026	162-39029	162-3902
Wire	12 PE	2000	2000	1500
Wire	18 PE	1000	1000	750
Wire	24 PE	750	750	500
Rope	4 mm	500	500	300
Rope	6 mm	200	200	150
Tape	12,5 mm	500	500	400
Tape	20 mm	400	400	300
Tape reinf.	20 mm	300	300	200
Tape	40 mm	150	150	100
Tape reinf.	40 mm	100	100	75



+= Incl. / Inkl.

Art. nr.	Description	PU	€ price/PU
162-39026	Reel, large with mounting frame	1	
162-60022	Support bracket for reel 162-39026	1	
162-39029-1	Reel for 162-39029 & 162-39026, spare	1	
880 0004-791	Reel, large geared 1:3, with wire devider	1	
162-39029	Reel, large with strap	1	
162-60023	Support bracket for reel 162-39029	1	
	162-39026 162-60022 162-39029-1 880 0004-791 162-39029	162-39026 Reel, large with mounting frame 162-60022 Support bracket for reel 162-39026 162-39029-1 Reel for 162-39029 & 162-39026, spare 880 0004-791 Reel, large geared 1:3, with wire devider 162-39029 Reel, large with strap	162-39026 Reel, large with mounting frame 1 162-60022 Support bracket for reel 162-39026 1 162-39029-1 Reel for 162-39029 & 162-39026, spare 1 880 0004-791 Reel, large geared 1:3, with wire devider 1 162-39029 Reel, large with strap 1

6. LARGE REEL GEARED 1:3

Reel equipped with an accelerator mechanism for fast spooling of wire, rope or tape. The drum rotates three times faster. Capacity for 200 mtr tape or 500 mtr wire

8. PRACTICAL SMALL REEL

Small versatile reel. Solid and durable for poly wire, rope and tape.

The reel is detachable and can be replaced by a reel with wire, rope or tape.

The reel has a construction that makes it possible to hang it on the existing fence, or on the KOLTEC angle iron post, code 162-80108. (In combination with code 162-39032-2).

Spool is suitable for 100 mtr 40 mm poly tape or upto 1,000 mtr thin poly wire.

10. SMALL REEL

Small versatile reel. Solid and durable for poly wire, rope and tape.

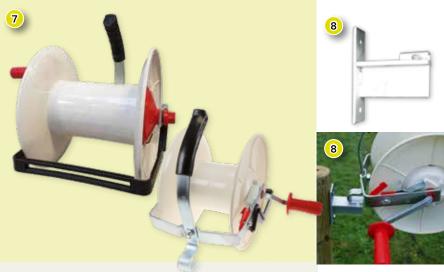
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The reel has a construction that makes it possible to hang it on the existing fence, or on the KOLTEC angle iron post. (In combination with code 162-39032-2)

13. WIRE DISPENSER

Heavy duty dispenser for easy unwinding of high tensile wire.

Now also suitable for Long Life Cable!









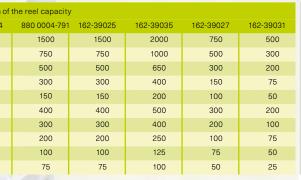




Photo	Art. nr.	Description	PU	€ price/PU
7	162-39035	Wide reel geared 1:3	1	
	162-39025	Reel, large geared 1:3 for 200 mtr tape/500 mtr polywire	1	
8	162-60021	Support bracket for reel 162-39024 & 25	1	
9	162-39027	Reel, small, all-round	1	
10	162-39028	Reel for 162-39027, spare	1	
11	162-39031	Small reel, handy for strip grazing	1	
12	162-39027-1	Brake pin, single, spare	1	
13	162-60024	Support bracket for reel 162-39027 & 31	1	
14	162-39033	Wire dispenser for heavy steel wire	1	



Photo	Art. nr.	Description	PU	€ price/PU
1	162-80121-15	Corner post, galvanized, 105 cm with M12 thread	15	
2	162-80108	Corner post, green, 130 cm with M12 thread, powder coated	1	
Acces	sories for corner p	posts		
3	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
4	162-79700-25	W-skirt insulator M8/M10/M12	25	
5	162-80095-25	Ring insulators with M6 on metal posts, incl. 2 nuts	25	
6	162-79083-4	Gate handle anchors KOLTEC, 3-way, galvanized, for metal posts M6	4	
7	162-80012-4	Corner roll insulators for rope and wire for metal posts with M6 thread incl. 2 nuts	4	
8	162-80038-4	Split insulators for angle iron post	4	
9	162-70500	Egg-insulator with 1 hook, single	1	
10	162-80040-25	Screw cap insulators, black screw cap, for M8, M10 and M12 thread	25	
11	162-79800-25	Tape insulator for brachets of/with 8mm/M10/M12 thread	25	

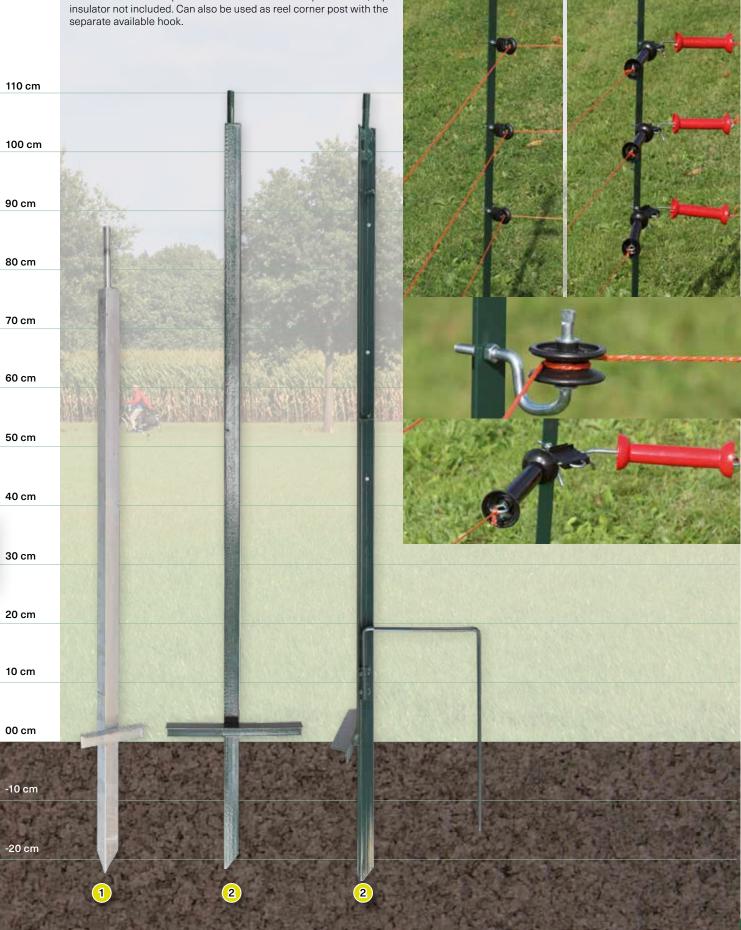
CORNER POSTS

1. CORNER LINE POST

Hot dipped, galvanized corner post with M12 thread. Delivered without insulator. This post is also made suitable to mount the Powergard and Powergard XP.

2. ANGLE IRON CORNER POST

Green coated corner post with various connection possibilities, top



STRIP GRAZING POSTS

1. FIBREGLASS GARDEN POSTS

A solid, discrete fibreglass post with a special synthetic foot for a stable mounting. The foot also takes care of less growth of weed around the post. Simplifying the maintenance of the garden. The black color takes care of a discrete placing of the fence. Is supplied with 1 click-on insulator (162-80063-25).

2. GREEN GARDEN POST

7 mm thick green garden post. Ideal for a hardly visible placing of a fence. Delivered with two green click-on insulators.

Art.nr. 162-80064-25

3-6, PVC-POSTS

Various PVC Poles with different lengths and pins. Equipped with top insulator for wire. Additional insulator item no. 162-80009-25.

7. "LIFE"POST

Post with an insulator at 40 cm and a "life" pigtail up to 85 cm.

8. GREEN PIGTAIL POST

Very solid, 8 mm thick green pigtail post. Perfect for temporary fences, with an environmental friendly colour. For the tensioning of more wires you can add insulator 162-80062-25.

Length 105 cm, max. fencing height 89 cm.

9. WHITE PIGTAIL POST

6 mm thick white spring steel pigtail post. Perfect for temporary fences. For the tensioning of more wires you can add insulator 162-80063-25. Length 105 cm, max. fencing height 89 cm.

10 - 11. SPRING STEEL FENCE POST WITH PIGTAIL INSULATOR

Green, oval steel fence post with top insulator and solid foot support. For the tensioning of more wires you can add insulator 162-80061-25. Length 105 cm,

max. fencing height 85 cm.

12. SPRING STEEL FENCE POST WITH RING INSULATOR

Green, oval steel fence post with ring insulator and solid foot support. For the tensioning of more wires or tape you can add insulator 162-80061-25 or 162-80048-25. Length 105 cm, max. fencing height 85 cm.

13 - 15. SPRING STEEL FENCE POST WITH ROPE INSULATOR

Green, oval steel fence post with rope insulator and solid foot support. For the tensioning of more wires or tape you can add insulator 162-80061-25 or 162-80048-25. Length 105 cm and 140 cm. Max. fencing height 85, 100 and 120 cm.

All information about the isulators for these posts you can find on page 79

















162-80061-25

62-80048-25

162-80015

162-80210-25

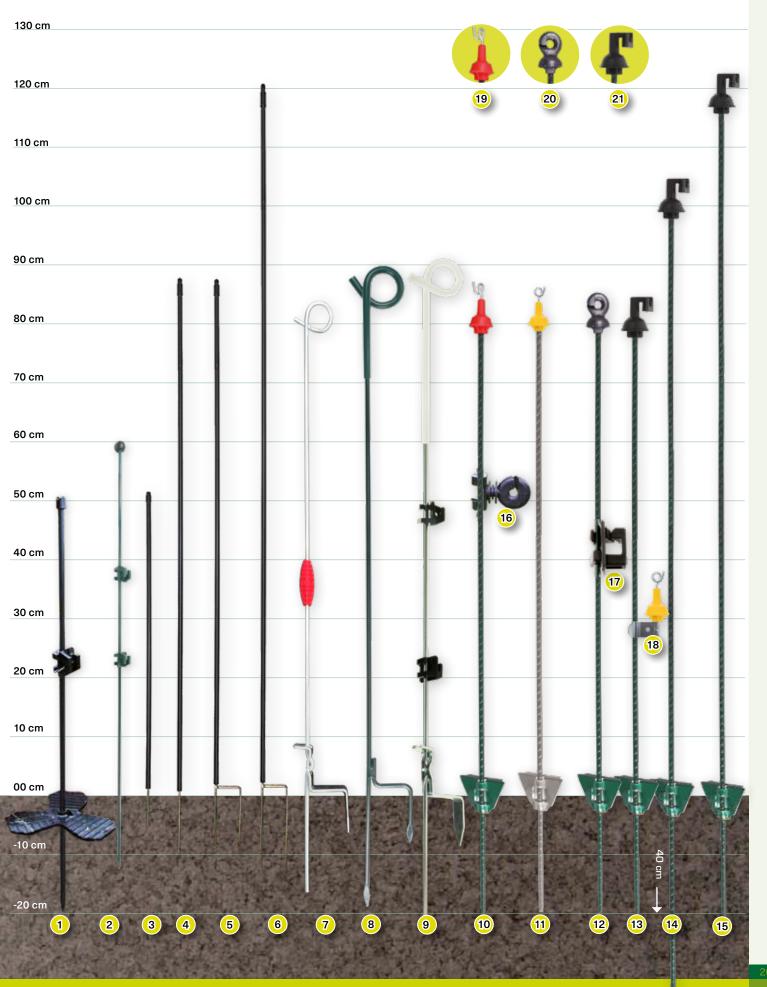
162-80065-10

162-80011-10

162-80038

162-80009-25

Photo	Art. nr.	Description	PU	€ price
1	162-80310-10	Garden posts, fibreglass, black, 50 cm	10	
2	162-80103-10	Garden posts, green, 100 cm 7 mm, incl. 2 click insulators, per 10	10	
3	162-50003-1	Extra and/or exchange post for green rabbit net	1	
4	162-50000-1	Post extra/exchange for green sheep net	1	
5	162-50000-12p	Post, spare, for sheep netting, 2 pins	1	
6	162-50011-12p	Post, spare, for poultry netting of 120 cm, 2 pins	1	
7	162-80114	"Live" Pigtail post 105 cm, second half conducts	1	
8	162-80106	Pigtail post, green 105 cm ø 8 mm, powder coated	30	
9	162-80165	Pigtail post, spring steel, white 105 cm 6 mm, heavy galvanized	30	
10	162-80102	Posts, spring steel, green, oval with pigtail insulator 105 cm	25	
11	162-80102-ggr	Post, spring steel, silver, oval with yellow pigtail insulator 105 cm	25	
12	162-80101	Posts, spring steel, green, oval with ring insulator 105 cm	25	
13	162-80125	Post, spring steel, 105 cm green, oval with rope insulator	25	
14	162-80159	Post, spring steel, 140/100 cm green, oval with rope insulator	25	Ī
15	162-80157	Post, spring steel, 140 cm green, oval with rope insulator	25	
16	162-80061-25	Ring insulators, klemmfix for oval spring steel posts	25	-
17	162-80048-25	Insulators for oval posts for tape up to 20 mm	25	
18	162-80015	Side pigtail insulator, for oval spring steel posts	1	
19	162-80117-25	Pigtail insulators, red for oval post, spare	25	
20	162-80116	Ring insulator for oval post, spare	1	
21	162-80118	Rope insulator for oval post, spare	1	
		DII	I_Dooking Llr	sit Price incl \/AT



STRIP GRAZING POSTS



METAL POSTS FOR A SOLID MOVABLE FENCING

These strong galvanized fence posts have a 25 mm M12 screw thread on the head and arms. Koltec has various insulators available that fit this perfectly. These can be attached quickly and easily.

There are 3 types of posts. With this, a fence can be set up for every animal species and fencing requirement.

Effective wire heights (incl. Insulator) are with the highest wire on resp. 85 and 125 cm. The 2nd thread is on resp. 50 and 80 cm high.

INSULATORS

If more wires are required because smaller animals are in the field, you can install additional insulators. Koltec has two types of click insulators which are suitable for 12 mm thick ration piles. This way you can quickly create an extra wire or tape at any desired height.







All information about the isulators for these posts you can find on page 79 & 92

Photo	Art. nr.	Description	PU	€ price/PU
1	162-80127-10	Fence post, 1 m incl. foot support. Provided with a M12 thread top	10	
2	162-80128-10	Fence post, 1 m incl.foot support and sidearm. Arm and top are provided with M12	10	
3	162-80129-10	Fence post, 1,50 m incl.foot support and sidearm. Arm and top are provided with M12	10	
Acces	ssories for strip gra	azing posts		
4	162-80054-25	Dump insulators KOLTEC, yellow+black cap, for M10 and M12 thread	25	
5	162-80054-z100	Dump insulators KOLTEC, complete black, for M10 and M12 thread	100	
6	162-80054-g100	Dump insulators KOLTEC, complete yellow, for M10 and M12 thread	100	
7	162-79700-25	W-skirt insulator M8/M10/M12	25	
8	162-80040-25	Screw cap insulators, black screw cap, for M8, M10 and M12 thread	25	
9	162-80044-25	Screw cap insulators, yellow screw cap, for M8, M10 and M12 thread	25	
10	162-79800-25	Tape insulator for brachets of/with 8mm/M10/M12 thread	25	
11	162-80010-25	Click insulators, yellow, for ø 10 mm posts	25	
12	162-80210-25	Click insulators, black, for wire and tape up to 20 mm on round ø 10 mm posts	25	

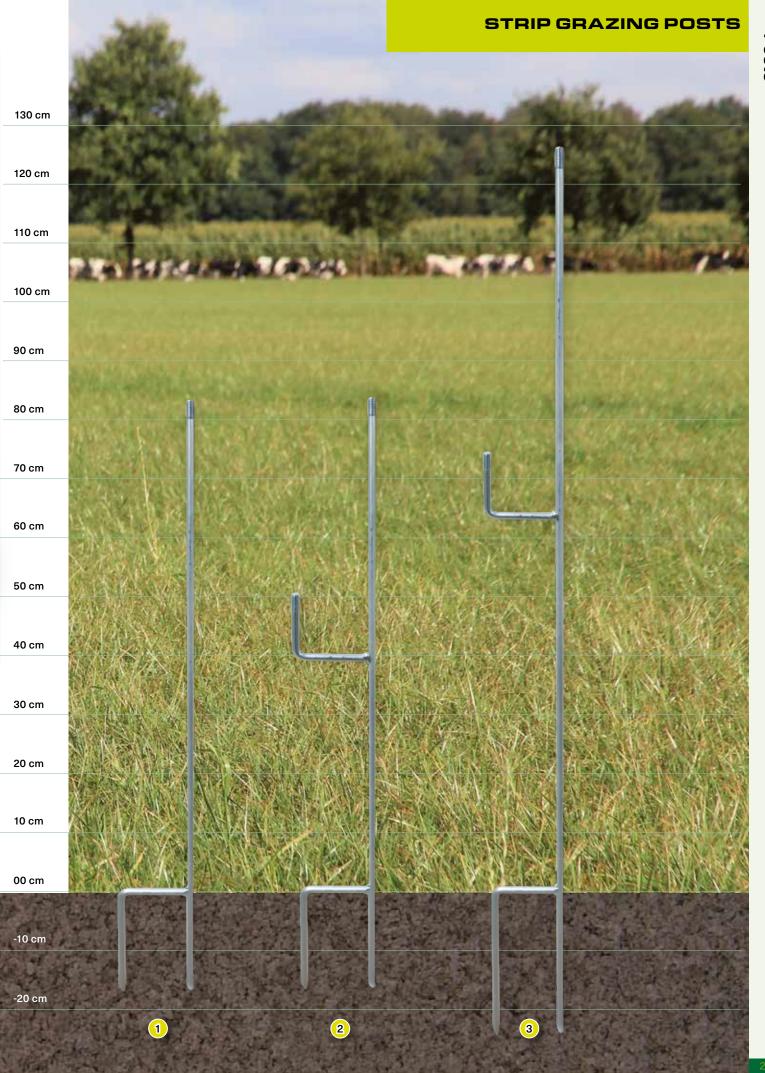


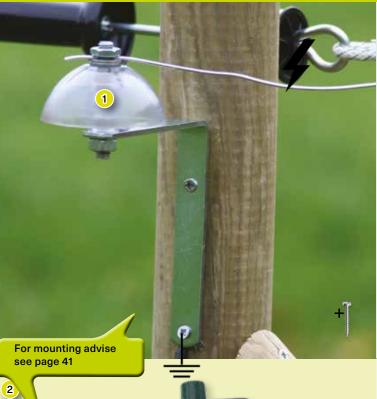


Photo	Art. nr.	Description	PU	€ price/pc
1	162-80340-10	Posts, synthetic, white 75 cm, budget only per 10	10	
2	162-80325-10	Posts, synthetic, white 105 cm, budget only per 10	10	
3	162-80327-10	Posts, synthetic, white 154 cm, budget only per 10	10	
4	162-80341-10	Posts, synthetic, black 75 cm, budget only per 10	10	
5	162-80337-10	Posts, synthetic, black 105 cm, budget only per 10	10	
6	162-80338-10	Posts, synthetic, black 154 cm, budget only per 10	10	
7	162-80332	Post, stirrup, synthetic, black, 120 cm	1	
8	162-80333	Post, stirrup, synthetic, black, 160 cm	1	
9	162-80328	Post, stirrup, synthetic, white, 120 cm	1	
10	162-80326	Post, stirrup, synthetic, white, 160 cm	1	

PU=Packing Unit Price incl. VAT



VARIOUS FENCING ACCESSORIES



1. LIGHTNING DIVERTER

Electric fencers are sensitive for lightning. With the proper prevention measures it is possible to prevent damage on the electric fencer when struck by lightning. The KOLTEC lightning diverter offers the necessary protection by diverting the lightning charge directly to the ground.

2. SECTION SWITCH

Ideal switch to connect or disconnect sections with 2 power exits

3. MULTIPURPOSE FENCING TOOL

Indispensable tool for cutting the wire, removing clamps or using it as a hammer.

4. WIRE PLIER FOR STEEL WIRE

5. ELECTRIC FENCE WARNING SIGN

Obligatory with an electric fence at a public road. The sign has to be placed every 50 m.

6. SIGN "VERBODEN TOEGANG"

Only for the Dutch market.









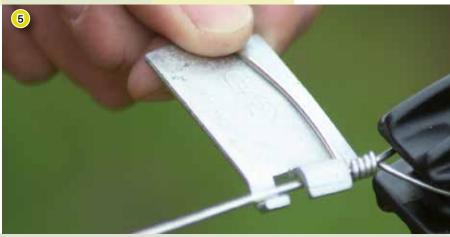
Photo	Art. nr.	Description	PU	€ price/PU
1	162-80175-1	Lightning diverter	1	
2	162-85470	Switch, high voltage, for connecting sections, two exit terminals	1	
3	162-85458	Fencing tool, multifunctional	1	
4	162-85482	Wire plier for steel wire	1	
5	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	
6	162-39505	Sign "Verboden toegang", only for the Netherlands	1	

VARIOUS FENCING ACCESSORIES









Art.nr. screw	To use with art.nr.:	Description
131-15180-200	162-80173-3	5 * 40 roundhead
	162-80175-1	
	162-85470	
131-15181-200	162-80082-25	5* 45 Conical
	162-80172-4	
	162-80046-4	
	162-80120-4	
131-15182-200	162-80166-10	4,5 * 35 roundhead
	162-80060-25	
	162-80171-3	
131-15183-200	162-80100-25	3,5 * 25 roundhead
	162-80100-100	
	162-80081-25	
	162-80081-100	
	162-80110-4	
	162-80111-2	
	162-80112-2	
	162-80180-25	
	162-80180-100	
	162-80404-25	
	162-80404-100	





Photo	Art. nr.	Description	PU	€ price/PU
1	162-85480	Screw aid KOLTEC, metal, for KOLTEC tape and ring insulators	1	
2	162-85472	Screw aid KOLTEC, metal aid for KOLTEC hook-ring insulators	1	
3	162-85461	Screw aid KOLTEC Lisofix, for ring insulators	1	
4	162-85469	Screw aid, metal, budget	1	
5	162-85471-4	Wire twisters for solid connection	4	
6	131-15180-200	Woodscrew, 5,0 * 40 mm PZ-2 panh., galv.	200	
7	131-15181-200	Woodscrew, 5,0 * 45 mm PZ-2 con, galv.	200	
8	131-15182-200	Woodscrew, 4,5* 35 mm PZ-2 panh., galv.	200	
9	131-15183-200	Woodscrew, 3,5 * 25 mm PZ-2 panh., galv.	200	

PU=Packing Unit Price incl. VAT



1. KOLTEC DETECTOR

The KOLTEC detector measures the voltage and the current with one push on the button by pressing the metal brace on the wire (wire under the brace). The big advantage of the KOLTEC detector is that also the current direction is been read out. In a fence the current always runs from the source (electric fencer) tot the short-circuit in the fence, taking the shortest possible way.

Voltage

The voltage can be read out by the KOLTEC detector, even so there is only one metal strip with which the fence is touched. The KOLTEC detector has a high impedance amplifier that makes it possible to take the hand of the user as reference capacity without feeling anything.

Current

During the measurement it is possible that the left or right direction light will flash. These lights are developed to indicate the direction of the current and with that de direction of the failure.

The KOLTEC detector calculates the resistance out the measured data and based on that a LED will be activated. If the tension is high, for example 7.0 kV and the current is 4 Ampere, than the tension is 1750 Ohm and the detector will not notice this as a failure and a direction light will not flash. If the tension is low, for example 2.5 kV and the current is 4 Ampère, than the resistance is 625 Ohm and the KOLTEC detector will activate a red direction light.

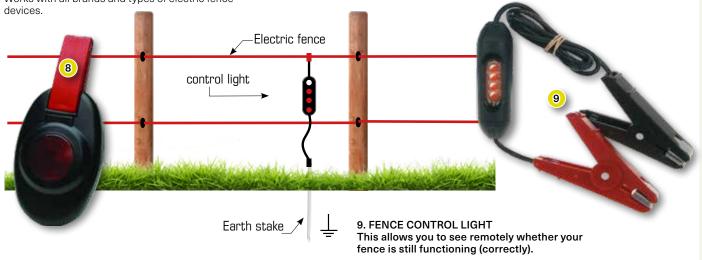


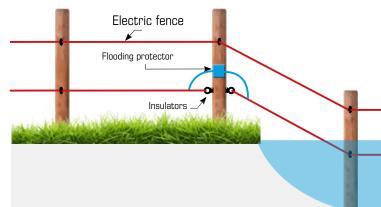




8. FENCE ALERT

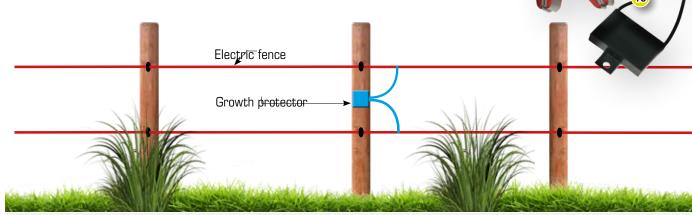
Starts flashing when the voltage on your fence drops below a desired level. Adjustable to 2 settings. Runs on a battery. Needs no earth or reference connection. Works with all brands and types of electric fence





8. FLOOD AND GROWTH PROTECTION

This protects your main fence against expected, but unavoidable, short-circuits due to flooding and / or heavy growth.



Water

Photo	Art. nr.	Description	PU	€ price/PU
1	162-85457	Detector KOLTEC, without reference wire	1	
2	162-85451	Voltmeter, digital, black, measuring range up to 9.900 Volt	1	
3	162-85449	Tester, indication tension measuring, without reference wire. Excl. batteries	1	
4	162-85455	Tester 8-O-lite, testing indication in 8-levels	1	
5	162-85460	Tester for electric fences, wireless	1	
6	162-85450-1	Tester, neon, tension indication	1	
7	162-85487	Pocket knife - tester Boundary Blade	1	
8	880 0000-521	Fence alert	1	
9	162-85477	Fence control light	1	
10	162-85478	Flood and growth protection	1	

PU=Packing Unit Price incl. VAT

CONNECTING SMALL FENCES

Connect the earth output (1) to an earth stake (2) with a high-tension cable.

Connect the current output (3) to the wire with a high — tension cable. Mount this close to a post for preventing sagging down. As an option you can mount a section switch, or an on/off switch in between.

You can safely connect the cable (4) with the other wires (7) with for instance screw terminals or connection kits.

Connect the fencer to mains (5).

BATTERY, WET-CELL BATTERY AND SOLAR-ENERGY

If you have no electric power available you can decide to buy a wet-cell battery or battery fencer.

In most cases they can also be nourished with solar-energy.

EARTHING

A wooden fence or wall insulates the electric fence wire from the earth. With the consequence that the animal does not feel the shock. This is easily solved by mounting a wire on the wooden fence or wall that is connected to the earth output of the fencer.

The same occurs around a pond, where there is used gravel or natural stone. Here the conducting problem can be solved by tensioning an extra wire between the two electric wires on the posts which can function as an earth return wire.

WOODEN FENCE

A wooden fence or wall insulates the electric fence wire from the earth. With the consequence that the animal does not feel the shock. This is easily solved by mounting a wire (6) on the wooden fence or wall that is connected to the earth output of the fencer.

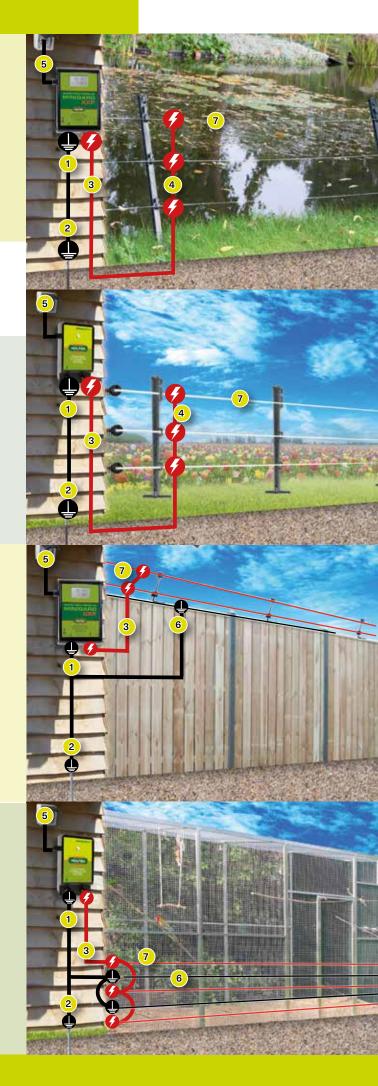
You can use the same wire as the electric wires. This wire does not need to be mounted insulated. An earth stake can be used as support.

AVIARY

An aviary has to be often protected against cats and birds of prey on the front, but also up above. You can protect the front and above with a gridding of at least 3 electric wires.

When the gaze is galvanized, the earth wire can be connected to the gaze (6). The gaze functions this way as an artificial earth. The aviary birds are not bothered by that.

If the gaze is plasticized, than there has to be mounted between the electric wires an earth wire (6). The plastic layer on the gaze isolates and can therefore not serve as zero or earth reference.





1. MINIGARD XXP

The MiniGard XXP is a very powerful energiser that tolerates some growth of weeds and/or grass, without a drastic decrease of the tension on the fence. This energiser is highly recommendable around ponds with lots of plants on the banks or gardens with lots of plants on the fence.

Where plants touch the wire, they will die. Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful energiser can't get through.

















2. MINIGARD XP

The MiniGard XP is 5x more powerful than the MiniGard II. It tolerates a little growth of weeds and/or grass. The energiser will hold the tension at light growth on a proper level. Where plants touches the wire, they will be scorched.















3. MINIGARD II HOBBY

A small energiser, very suitable for short distance fences. Does not tolerate growth of weeds and/or grass. The MiniGard can be installed in combination with various accessories to make a fence to size.













Photo	Art. nr.	Description	PU	€ price/PU
1	161-82529	Energiser KOLTEC MiniGard XXP mains	1	
2	161-82524	Energiser KOLTEC MiniGard XP mains, ideal for large gardens	1	
3	161-82520	Energiser KOLTEC MiniGard II Hobby mains, for wooden fences and aviaries	1	



1. MINIGARD XXP POND KIT

This kit is designed especially to fence ponds. The MiniGard XXP is an energiser that tolerates some

growth of pond plants, without loosing the tension on the fence.

This kit contains a MiniGard XXP, a connection cable set, 100 meter special turbo wire and two plastic wire strainers. Apart from this kit you need garden posts, with, depending on which kind of post, matching insulators. When the MiniGard XXP is installed at a longer distance from the pond, we recommend the use of high voltage cable for the connection. With a digital display which gives you information about the fence.

Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful fencer can't get through.

2. MINIGARD XXP

The MiniGard XXP is a very powerful energiser that tolerates some growth of weeds and/or grass, without a drastic decrease of the tension on the fence. This energiser is highly recommendable around ponds with lots of plants on the banks or gardens with lots of plants on the fence. Where plants touch the wire, they will die. Because of the high power the energiser is extremely suitable for scaring away herons. These birds, that often fish the ponds empty, have insulated feathers, where the pulse of a less powerful energiser can't get through.

5. POND EDGE CLAMP

Nice and practical clamp for a natural stone or wooden pond edge. You can screw in the insulators very easy. Suitable for edges up to 40 mm thick



				760000
Photo	Art. nr.	Description	PU	€ price/PU
1	161-82528	Energiser KOLTEC MiniGard XXP mains, pond kit	1	
2	161-82529	Energiser KOLTEC MiniGard XXP mains	1	
3	162-39023	Wire, green 3*0,2niro + 3*0,25Cu 100 mtr	100	
4	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
5	162-80164-4	Pond edge clamps + insulators per 4 pieces	4	
6	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
	162-80508-10	Ring insulator, half long/10 cm with M6, incl. INOX nuts, for metal posts	10	
7	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	















1. MINIGARD XP GARDEN KIT

In this kit there is a more powerful version of the energiser.

This fence energiser is suitable for longer fences and is less sensitive for eventual light growth of weeds or plants. Besides the fencer we will deliver a basic kit with which a fence can be build.

All you need to buy further are garden posts or insulator supports for the fence and an earthpin.

The kit contains a MiniGard XP, 2 wire strainers, connecting cable set and 250 meter wire.

2. MINIGARD XP

The MiniGard XP is 5x more powerful than the MiniGard II. It tolerates a little growth of weeds and/or grass. The energiser will hold the tension at light growth on a proper level. Where plants touches the wire, they will be scorched.

Photo	Art. nr.	Description	PU	€ price/PU
1	161-82527	Energiser KOLTEC MiniGard XP mains, garden kit	1	
2	161-82524	Energiser KOLTEC MiniGard XP mains, ideal for large gardens	1	
3	162-39015	Wire, black, 250 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	250	
4	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
5	162-80103-10	Garden posts, green, 100 cm 7 mm, incl. 2 click insulators, per 10	10	
	162-80310-10	Garden posts, fibreglass, black, 50 cm, see page 118	10	
6	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
		DU D		. D

PU=Packing Unit Price incl. VAT

1



1. MINIGARD II AVIARY KIT

In this kit we added to the MiniGard II 25 little ring insulators, a plastic wire strainer, 100 meter wire and a connecting cable kit.

2. MINIGARD II HOBBY

A small energiser, very suitable for short distance fences. Does not tolerate growth of weeds and/or grass. The MiniGard can be installed in combination with various accessories to make a fence to size.



Photo	Art. nr.	Description	PU	€ price/PU
1	161-82526	Energiser KOLTEC MiniGard II aviary kit mains, for wooden cages	1	
	161-82523	Energiser KOLTEC MiniGard II aviary kit mains, for metal cages	1	
2	161-82520	Energiser KOLTEC MiniGard II Hobby mains, for wooden fences and aviaries	1	
3	162-39010	Wire, black, 100 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	100	
4	162-80150-2zw	Strainer reinforced, synthetic, black, for wire, package of 2	2	
5	162-80088-25	Ring insulators, small for wooden constructions	25	
	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	
6	162-85608	All-round connection kit, INOX, with crocodile clip, red and black, length 150 cm	1	
	162-80099-25	Ring insulators, small with M5 thread, for metal constructions		

MINIGARD GARDEN FENCE KIT

This set is mainly intended for keeping cats out of your garden. But vice versa, it also keeps your own cat in the garden.

This complete kit for fences consists of the MiniGard II Hobby mains unit supplemented with 16 insulator supports with 2 insulators each, 4 small ring insulators, 4 plastic wire tensioners, 100 metres of fence wire, 5 metres of high-tension cable, earth stake and a tester.

The standard materials supplied are sufficient for approx. 26 - 32 mtr of fence fence.



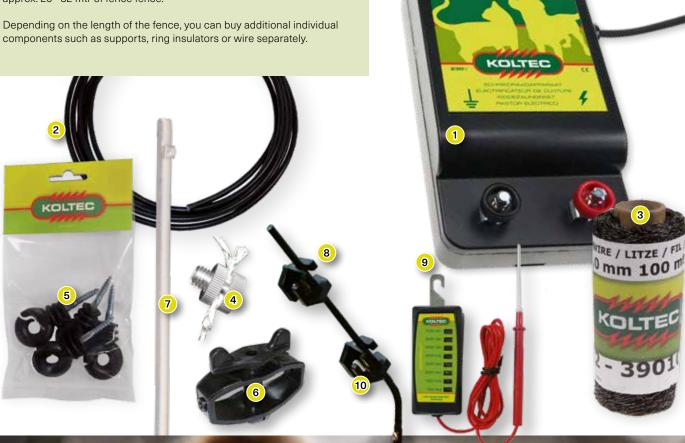












Art. nr.	Description	PU	€ price/PU
161-82550	Minigard garden fence kit for 26 - 32 m fence	1	
	Loose or additional parts:		
133-36122-05	High tension cable, coil with 5 m, flexible 7 strand inox core	5	
133-36122-10	High tension cable, coil with 10 m, flexible 7 strand inox core	10	
162-39010	Wire, black, 100 m ca 2 mm, 12 PE wires	100	
162-39034-4	Wire connectors for thin wire	4	
162-80088-4	Ring insulators, small for wooden constructions, per 4 pcs	4	
162-80150-zw	Strainer reinforced, synthetic, black, for wire	1	
162-80198	Earth stake, short, 45 cm with connector	1	
162-80110-4	Insulator brackets for wooden fences	4	
162-85455	Tester 8-O-lite, testing indication in 8-levels	1	
162-80063-4	Click insulators, black, for posts of ø 6 mm	4	
	161-82550 133-36122-05 133-36122-10 162-39010 162-39034-4 162-80088-4 162-80150-zw 162-80198 162-80110-4 162-85455	161-82550 Minigard garden fence kit for 26 - 32 m fence Loose or additional parts: 133-36122-05 High tension cable, coil with 5 m, flexible 7 strand inox core 133-36122-10 High tension cable, coil with 10 m, flexible 7 strand inox core 162-39010 Wire, black, 100 m ca 2 mm, 12 PE wires 162-39034-4 Wire connectors for thin wire 162-80088-4 Ring insulators, small for wooden constructions, per 4 pcs 162-80150-zw Strainer reinforced, synthetic, black, for wire 162-80198 Earth stake, short, 45 cm with connector 162-80110-4 Insulator brackets for wooden fences 162-85455 Tester 8-O-lite, testing indication in 8-levels	161-82550 Minigard garden fence kit for 26 - 32 m fence 1 Loose or additional parts: 133-36122-05 High tension cable, coil with 5 m, flexible 7 strand inox core 5 133-36122-10 High tension cable, coil with 10 m, flexible 7 strand inox core 10 162-39010 Wire, black, 100 m ca 2 mm, 12 PE wires 100 162-39034-4 Wire connectors for thin wire 4 162-80088-4 Ring insulators, small for wooden constructions, per 4 pcs 4 162-80150-zw Strainer reinforced, synthetic, black, for wire 1 162-80198 Earth stake, short, 45 cm with connector 1 162-80110-4 Insulator brackets for wooden fences 4 162-85455 Tester 8-0-lite, testing indication in 8-levels 1

PU=Packing Unit Price incl. VAT



1. BLACK POLY POST

Black post, with built-in insulators for all kind of wires.

3

3. GREEN PIGTAIL POST

Dark green pigtail post, 8 mm thick. Extra insulators are available, art.nr. 162-80062-25.

2. FIBREGLASS GARDEN POSTS

A solid, discrete fibreglass post with a special synthetic foot for a stable mounting. The foot also takes care of less growth of weed around the post. Simplifying the maintenance of the garden. The black color takes care of a discrete placing of the fence. Is supplied with 1 click-on insulator (162-80063-25).



4. GREEN GARDEN POST

7 mm thick green garden post. Ideal for a hardly visible placing of a fence. Delivered with two green click-on insulators.

Art.nr. 162-80064-25

Photo	Art. nr.	Description	PU	€ price/PU
1	162-80341-10	Posts, synthetic, black 75 cm, budget only per 10	10	
2	162-80310-10	Garden posts, fibreglass, black, 50 cm	10	
3	162-80106	Pigtail post, green 105 cm ø 8 mm, powder coated	1	
4	162-80103-10	Garden posts, green, 100 cm 7 mm, incl. 2 click insulators, per 10	10	
5	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
6	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
7	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	

ACCESSORIES

1 - 2. INSULATOR BRACKET

Practical bracket designed for mounting on walls and wooden fences. Standard delivered with two insulators.

Single insulators, art.nr. 162-80063-25, are per bag of 25 pcs available.

4 brackets per pack.

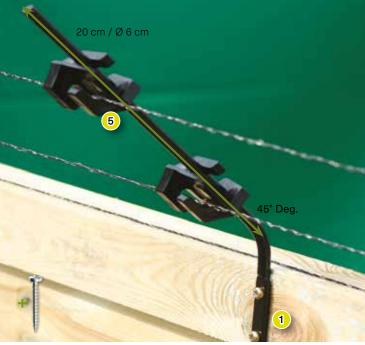
3. INSULATOR BRACKET FOR CORNERS

For leading a wire on a fence through the corners of a garden, this is an ideal bracket. Packed per 2 pcs.

4. INSULATOR BRACKET FOR VARIES

Ideal for leading a wire in varies on a wall or fence, keeping the wires in line with the fence itself. Packed per 2 pcs.







A wooden fence or wall insulates the electric fence wire from the earth. If a cat or other animal climbs against the fence, it won't feel anything. This problem can be solved very easily, by mounting an earth wire on top of the wooden fence or wall that is connected with the earth pole of the fencer.

The same problem can occur in a fence around a pond, where the edge of the pond is surfaced with e.g. marble stone. Also in this case you can solve the problem by using an earth return wire between the two "hot" wires on the posts.

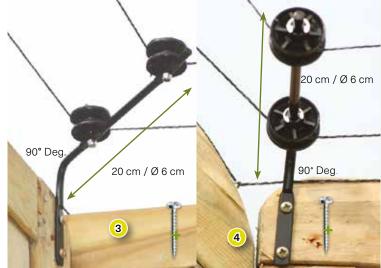


Photo	Art. nr.	Description	PU	€ price/PU
1	162-80110-4	Insulator brackets for wooden fences	4	
2	162-80163-4	Insulator bracket, right-angle incl. 2 insulators, per 4	4	
3	162-80111-2	Insulator brackets for corner support for edges	2	
4	162-80112-2	Insulator brackets, support for varies	2	
5	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
	162-80063-4	Click insulators, black, for posts of ø 6 mm	4	

PU=Packing Unit Price incl. VAT

ACCESSORIES





BRAIDED POLY WIRE

Thin, green poly wire for a camouflaging mounting on a fence round a pond or border.



POLY WIRE

Sturdy black wire with a very good conductivity. Suitable for long fences and mechanical heavy circumstances.

200 mtr 162-39127 500 mtr 162-39126 1.000 mtr 162-39124



7,60 Ω/mtr 🔸

3*0,20 inox

55 KG

POLY WIRE

Thin, wire, an effective conductor for fences, walls and around ponds.

Orange 100mtr 162-39000 Orange 250mtr 162-39020 Black 100mtr 162-39010 Black 250mtr 162-39015

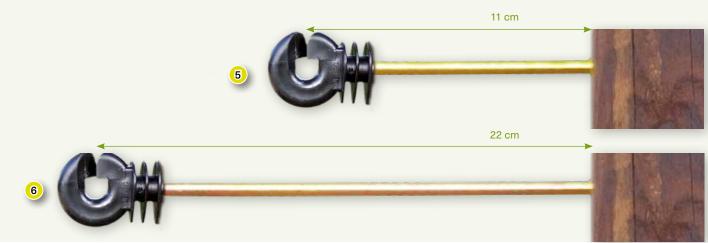


Photo	Art. nr.	Description	PU	€ price/PU
1	162-39023	Wire, green 3*0,2niro + 3*0,25Cu 100 mtr	100	
2	162-39126	$Wire poly, black, 200 \text{ m} \pm 3,5 \text{ mm}, 30 \text{ PE wires} + 6 \pm 0,3 \text{ INOX} + 3 \pm 0,25 \text{cu}, breaking strength 150 kg, res. 0,03 \text{ Ohm/m}$	500	
	162-39127	$Wire poly, black, 500 \text{ m} \pm 3,5 \text{ mm}, 30 \text{ PE wires} + 6*0,3 \text{ INOX} + 3*0,25 \text{cu}, breaking strength 150 kg, res. 0,03 \text{ Ohm/m} = 2.00 \text{ Mpc} + 2.00 \text{ Mpc} + 2.00 \text{ Mpc} = 2.00 \text{ Mpc} + 2.00 \text{ Mpc} = $	200	
	162-39124	$Wire poly, black, 1.000 \text{ m} \pm 3,5 \text{ mm}, 30 \text{ PE wires} + 6*0,3 \text{ INOX} + 3*0,25 \text{cu}, breaking strength 150 kg, res. 0,030 \text{hm/m}$	1000	
3	162-39010	Wire, black, 100 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	100	
	162-39015	Wire, black, 250 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	250	
	162-39000	Wire, orange, 100 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	100	
	162-39020	Wire, orange, 250 m ca 2 mm, 12 PE wires + 3*0,2 INOX, breaking strength 55 kg, resistance 7,6 Ohm/m	250	













			100	- TOTAL CO. (C.)
Photo	Art. nr.	Description	PU	€ price/PU
1	162-80063-25	Click insulators, black, for posts of ø 6 mm	25	
	162-80063-4	Click insulators, black, for posts of ø 6 mm	4	
	162-80062-25	Click insulators, green, for posts of ø 8 mm	25	
	162-80064-25	Click insulators, green, for posts of ø 7 mm	25	
2	162-80099-25	Ring insulators, small with M5 thread, for metal constructions	25	
3	162-80088-25	Ring insulators, small for wooden constructions	25	
	162-80088-4	Ring insulators, small for wooden constructions, per 4 pcs	4	
4	162-80506-25	Ring insulators, INOX, with M6 thread, incl. INOX nuts, for metal posts	25	
5	162-80505-20	Ring insulators special, half long 10 cm, for wooden posts	20	
6	162-80503-10	Offset ring insulators, 22 cm for wire/rope on wooden posts	10	
7	162-80508-10	Ring insulator, half long/10 cm with M6, incl. INOX nuts, for metal posts	10	
8	162-80507-10	Offset ring insulators, INOX, 20 cm with M6 thread for wire/rope on metal posts	10	
			DU Daaldaa Ua	+ D.: ! I \/AT

PU=Packing Unit Price incl. VAT

ACCESSORIES







10

1. SCREW TERMINAL

Black, handy to mount/connect HT-cable with poly wire.

2-4. WIRE CONNECTORS

Double zinc plated & INOX Single zinc plated & INOX

5. GROUND CABLE

High-voltage cable with stainless steel braid. Connection cable which can be placed underground and is protected against mechanical influences by its stainless steel braid. The braid can also be used as an earth lead/rod.

6. HIGH VOLTAGE CABLE

HT-cable with a solid core of 1.6 mm. Insulation up to 2.000 V.

7. HIGH VOLTAGE CABLE (PER 10 MTR)

To connect a fencer to the fence, we recommend the use of high voltage cable. This cable has an insulation value of 12.000 Volt and therefore very suitable to lead this cable through a wall, connecting the fencer.

10. EARTH STAKE 45 cm

When you want to have the maximum use of your electric fencer, then earthing is of crucial importance. Without earthing the system can never work properly. The earthing has to be as such that a very low resistance is present.

11. LIGTHNING ARRESTOR

Fence energisers are sensitive for lightning. With the proper prevention measures, the chance of possible damage to the energisers can be reduced.

See page 41 for more information and installation instructions.

12. SWITCH

Ideal for connecting two circuits with eachother. It has two outlets for connecting two different circuits.

See page 41 for more information and instal-











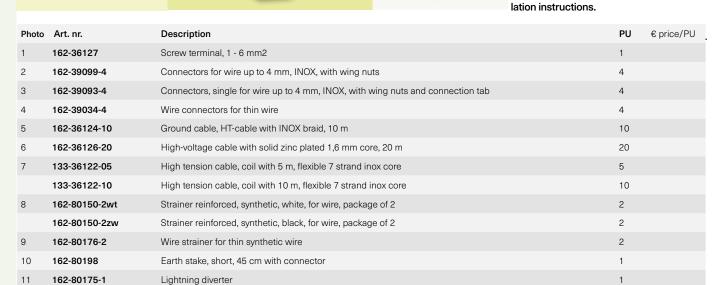
8. STRAINER

Plastic wire strainer to use with poly wire and aluminium wire. Due to a pecial construction, the wire can be strained in line.

9. STRAINER

Simpel strainer for thin poly wire.





Switch, high voltage, for connecting sections, two exit terminals

128

12

162-85470

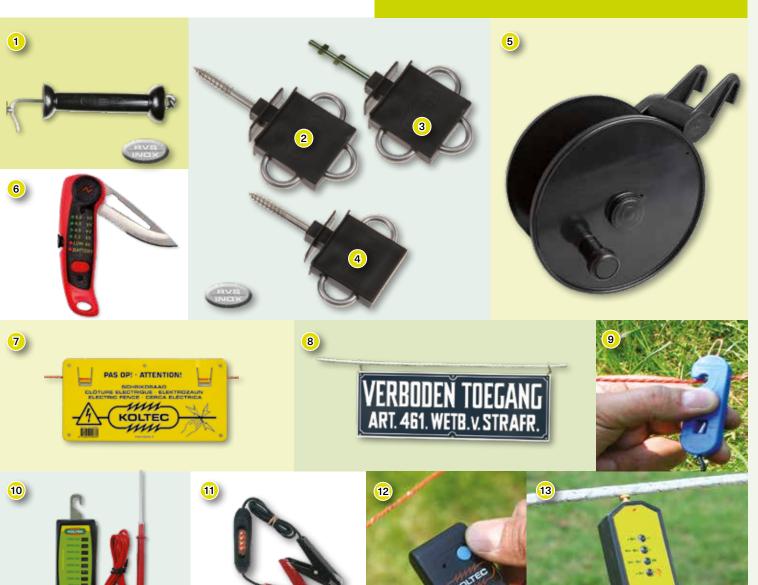


Photo	Art. nr.	Description	PU	€ price/PU
1	162-80019	Gate handle KOLTEC, black, INOX	1	
2	162-79082-4	Gate handle anchors KOLTEC, 3-way, INOX	4	
3	162-79084-4	Gate handle anchors KOLTEC, 3-way, INOX, for metal posts M6	4	
4	162-79080-4	Gate handle anchors KOLTEC, 2-way, INOX	4	
5	162-39031	Small reel, handy for strip grazing	1	
6	162-85487	Pocket knife - tester Boundary Blade	1	
7	162-39501-4	Signs "Warning electric fence", obligatory along public roads (4)	4	
8	162-39505	Sign "Verboden toegang", only for the Netherlands	1	
9	162-85450-1	Tester, neon, tension indication	1	
10	162-85455	Tester 8-O-lite, testing indication in 8-levels	1	
11	162-85477	Fence control light	1	
12	162-85460	Tester for electric fences, wireless	1	
13	162-85449	Tester, indication tension measuring, without reference wire. Excl. batteries	1	

PU=Packing Unit Price incl. VAT

PRESENTATION



KOLTEC is presented more and more in shops and fairs

On the shelves with KOLTEC products you'll find most components which are needed for building an electric fence. On fairs and markets KOLTEC can be represented by the wagon as shown below. By which the use of the materials is demonstrated in a practical way.



ELEKTROZAUN



Design your electric fence: Scan and print this page for multiple use.

				POSTS: DISTANCE BETWEEN POSTS										NUMBER OF WIRE/TAPE/ROPE ONE ABOVE THE OTHER					 STAN	020				
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																								T
																								1
																								+
																								+
																								+
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																								+
																								4

	ORDER				
	Art.Nr.	Discription	#	Price	Sub-total
WIRE / TAPE / ROPE					
INSULATORS BETWEEN					
CORNER INSULATORS					
ENERGISERS					
EARTHNING / LIGHTNING					
CONNECTION					
GATE MATERIAL					
POLES					
MISCELLANEOUS					

Total

www.**koltec**.eu



Scan this QR-code with your smartphone and go directly to our website **www.koltec.eu**.

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KOLTEC BV reserves the right to change,

update and improve specifications and prices without notice.

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YOU CAN FIND ALL OUR PRODUCTS ALSO AT

www.koltec.eu

