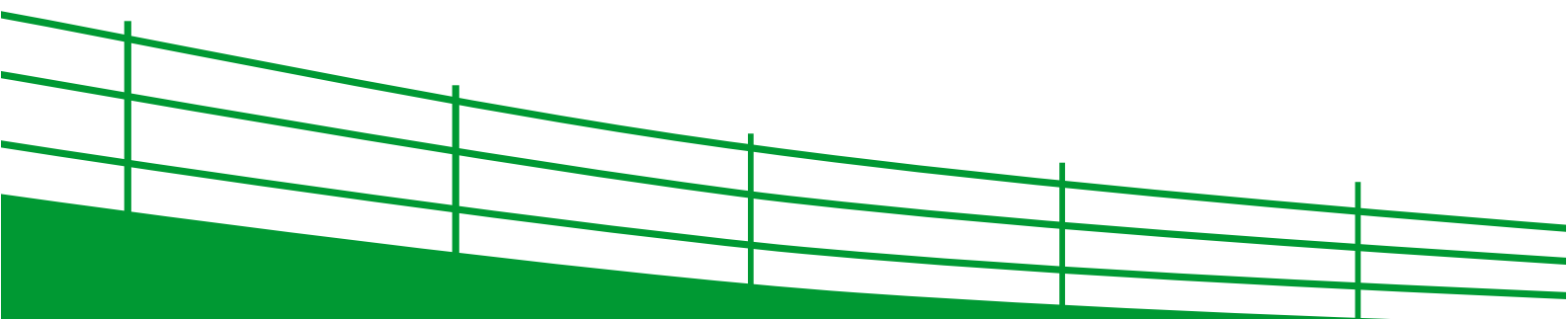




Fencing products

2007





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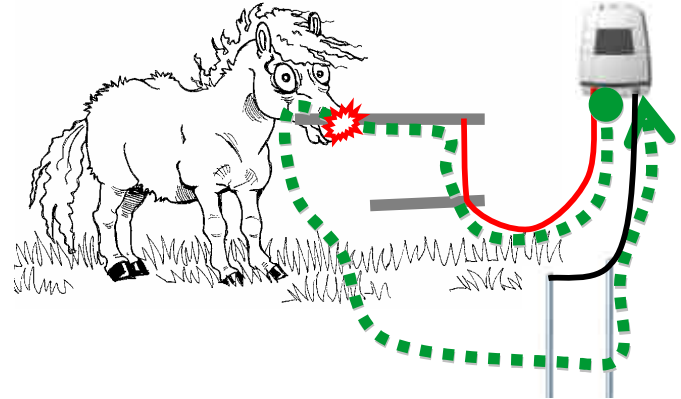
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## Introduction

This guide presents the Olli electrifying fencing product range and gives some tips for building a safe and well working electric fence.

The electric fence is a cost efficient, animal friendly and safe way to control the movements of animals. By following the instructions and using the proven Olli accessories you can ensure the best function of your fence.

The function of an electric fence is based on the respect of the animals. The shock from the fence is not dangerous but feels so unpleasant that after a few attempts to touch the fence the animals starts to avoiding it. No heavy and expensive structures are needed to guard the animals, even wild animals learn to learn to respect an electric fence.



**An electric fence works like this:** Electric current flows from the energiser to the fence. When the animal touches the fence, the electricity flows through the body of the animal to the soil and further on back to the fence via the grounding rods. The animal experiences a mild electric shock as the electrons pass through its body.

## Installation of the fence energiser

The fence energiser shall be placed above the ground level and inaccessible for animals and small children. Olli fence energiser is rain water proof but it always recommended to place it protected from rain and direct sun exposure.

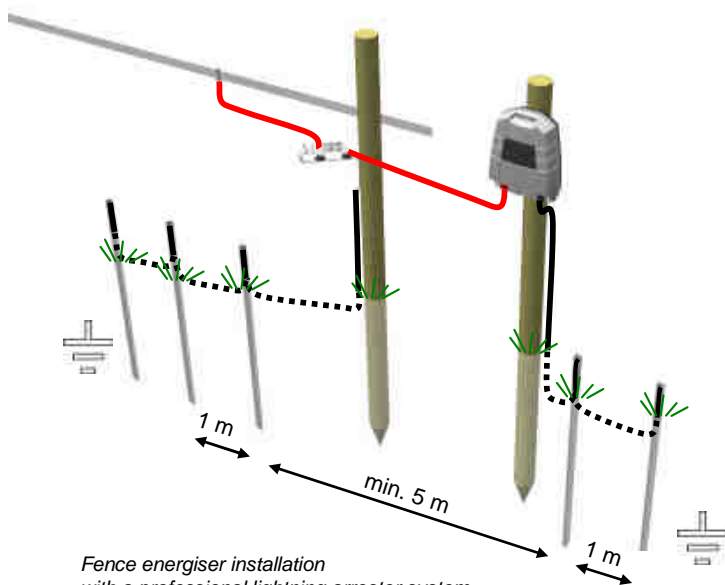
Always install the energiser in vertical position and never mount it upside down!

If you want to position the fence energiser inside a building or if you need to lead fence voltage under ground, use always Olli high voltage ground cable for transferring fence voltage to the fence. **Never use 230V electric cables in electric fence installations.** The regular 230 Volt installation materials are specified for maximum 700 Volts and therefore they are not suitable for fence voltages that may be up to 10 000 volts.

During thunder disconnect the fencer from the fence and mains electricity to avoid damage. If this is not possible, a lightning arrester system reduces the probability for damage caused by thunder.

## Safety

Always follow the safety precautions that are given in the user manual of the fence energiser.



Fence energiser installation with a professional lightning arrester system.



## Grounding of the fence energizer

The fence energizer pulse causes a shock only if the electricity has a free return path back from the soil to the ground terminal of the fence energizer. To provide this return path the energizer ground terminal is connected to the soil with **ground rods**.

An exception are fences where a separate grounding wire is used as the return path for the electricity. Even in this kind of fences the fence energizer has to be grounded with ground rods to avoid disturbances.

Locate an area of soil for placing ground rods that contains good conductive earth (not sandy or rocky). Soil that is moist throughout the year is best.

Drive ground rods 1 meter apart in a straight line or a triangle pattern in the selected ground area. Leave the ends 10 cm above the ground for securing ground clamps.

Connect the ground rods, in series, with the wire provided with the Olli ground rods. Mark the area as a hazard.

Optimally you need 1 ground rod per output joule of the energizer, in good conditions a smaller number will be adequate.

## Safety and prevention of radio disturbances

Locate the ground system within 30 m of your fence energizer. Always locate the ground rods a minimum of 10 meters away from:

- Utility company (Electric, Gas, Water, phone) ground systems.
- Underground water pipes
- Metal water tanks
- Metal sidings on buildings

If you connect the grounding of a fencer metal to water pipes, it is possible that you can get electric shocks for example in the shower!

Connecting the fencer to the groundings of the general electricity or telephone network groundings may cause disturbances in radio and telephone devices.

## Testing of the fence

Once the fence is ready, test the function with Olli fence voltmeter. Stick the grounding stick of the tester to the ground and touch the fence with the pin at the top of the tester.

Generally the fence voltage in a good working fence is between 4 and 10 kV (4000-10 000V) depending on the fencer and fence length.

Cattle and horses require a voltage of 2 kV or more whereas fences for sheep or wild animals need generally a fence voltage of 3 kV or more.

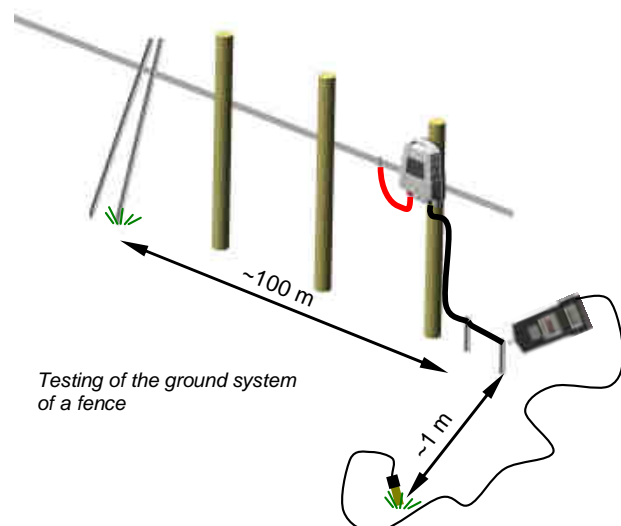
it is a good practice to measure the fence voltage in regular intervals to ensure that the fence works properly. If readings deviate clearly from the usual values, you know that the fence has to be inspected for eventual problems.

## Testing of the grounding with the Olli Digitester

1. Switch off the fence energizer
2. Short the fence to the soil at a distance of at least 100 m from the ground rods, for example by leaning an iron bar against the fence conductors.
3. Switch on the fence energizer and do the following measurement:

Stick the earth stick of the Olli Digitester to the ground, about 1 m from the nearest ground rod. Then touch the head of the ground rod with the pin of the tester.










If the reading is more than 300 Volts (0,3 kV on the Digitester display), the grounding should be improved. There may be too few ground rods, they may be rusted or they can be situated in a too dry or sandy place.



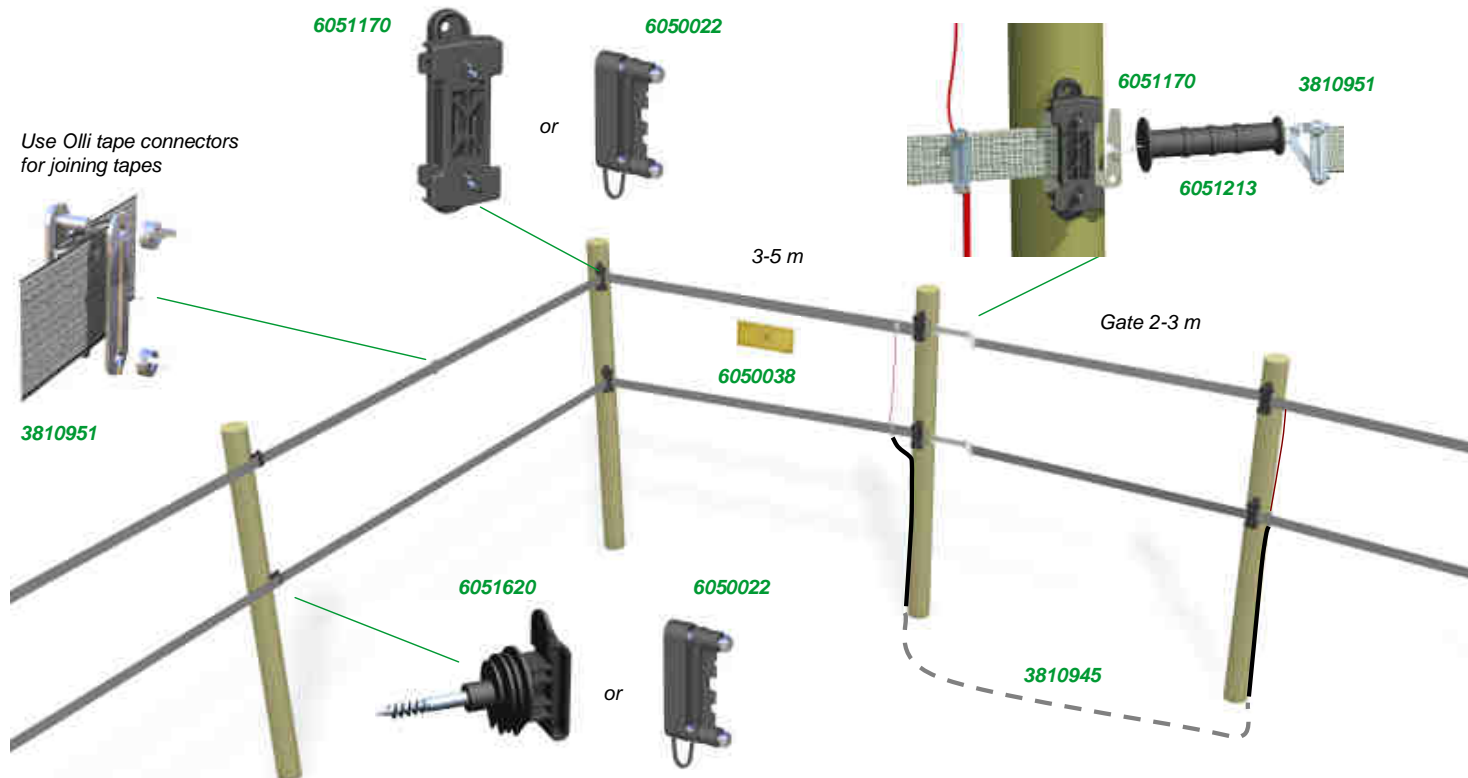
Testing of the ground system of a fence



## Olli insulators

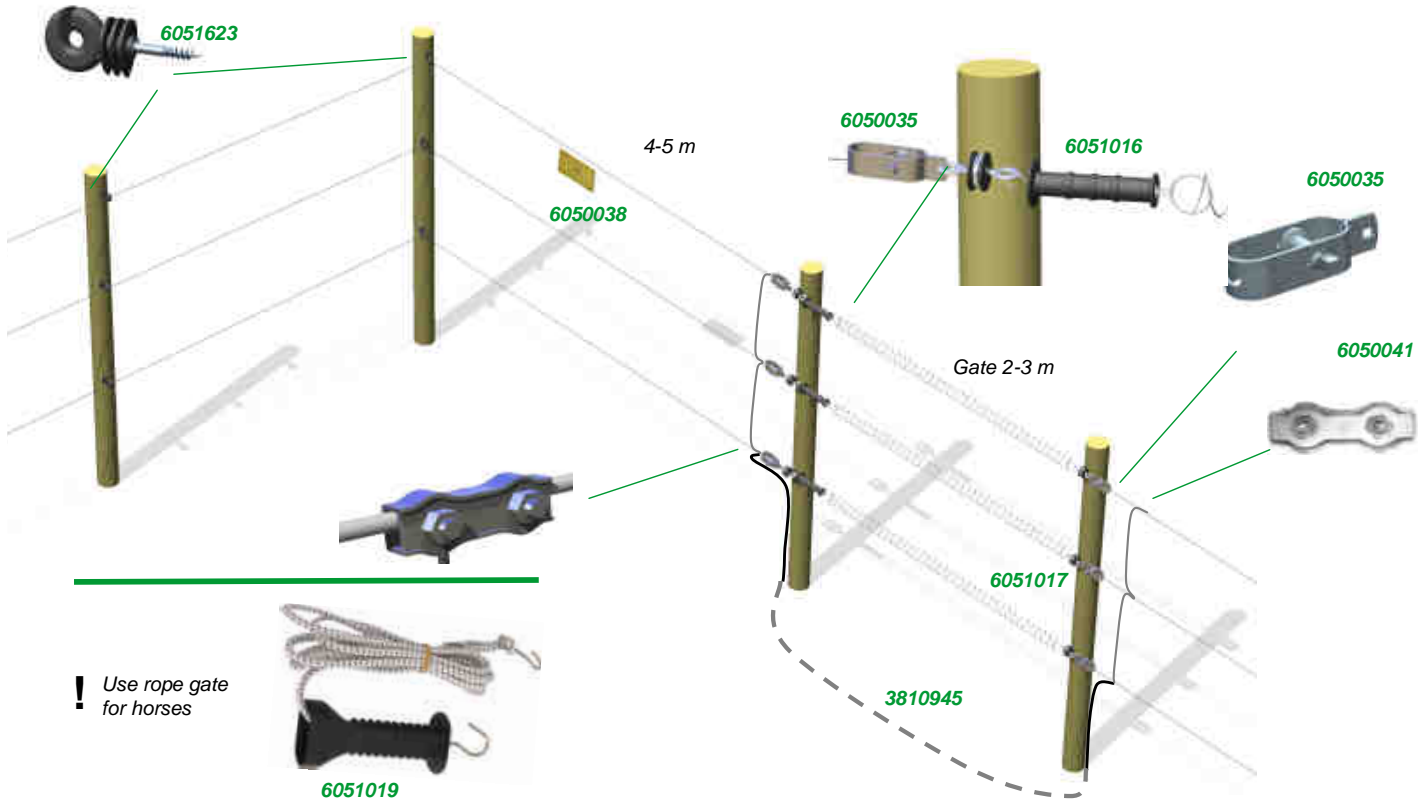
PRODUCT	CODE
 <b>NAIL INSULATOR, 100 pcs in a bag</b> For thin wires and tapes. Use nail or screw for mounting.	6050071
 <b>RING INSULATOR, 100 pcs in a bucket</b> For wires, ropes and thin tapes.	6051623
 <b>INSULATOR WITH 18cm BAR, 10 pcs in a bag</b> For wires, ropes and also for tapes up to 20 mm	6050074
 <b>TAPEINSULATOR, 100 pcs in a bucket</b> For all tapes up to 40 mm.	6051620
 <b>EXTRA WIDE TAPEN INSULATOR, 25 pcs in a bag</b> Special insulator for 100 mm wide fence tape. Mounting with two screws.	6051621
 <b>DUO-INSULATOR, 50 pcs in a bag</b> For wires, ropes and also tapes up to 40 mm.	6050022
 <b>GATE INSULATOR, 2 pcs in a bag</b> Gate insulator for wires and ropes. and thin tapes. Stainless steel ring	6051017
 <b>GATE INSULATOR FOR TAPES, 2 pcs in a bag</b> For 20-40 mm fence tapes. Use for gates but also excellent for corners. Stainless metal part.	6051170
 <b>EGG INSULATOR, 10 pcs in a bag</b> For steel wires, for corners etc.	6051631

## Example: fence with 20-40 mm polyethylene tape

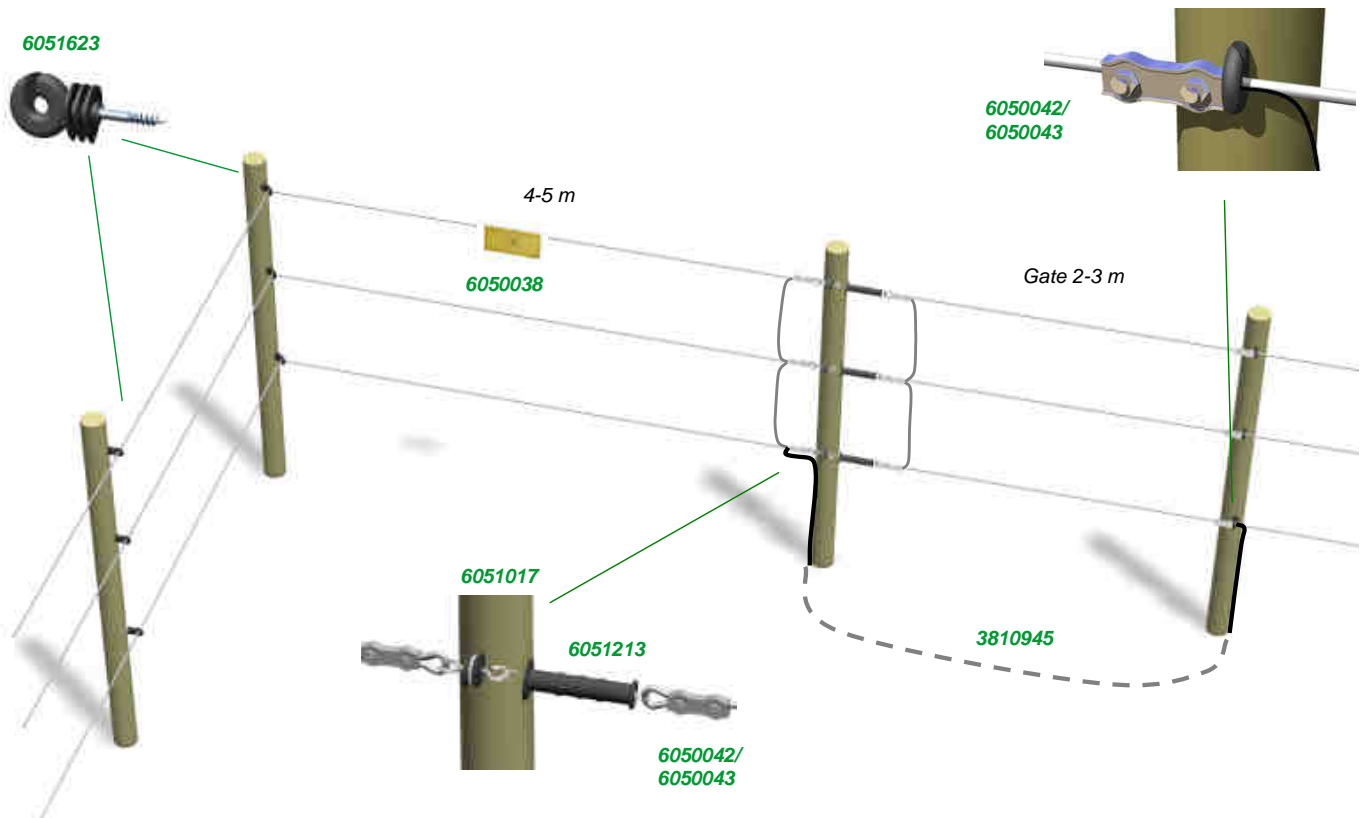




## Example: permanent fence with steel wire



## Example: fence with polyethylene electric rope



















## Accessories



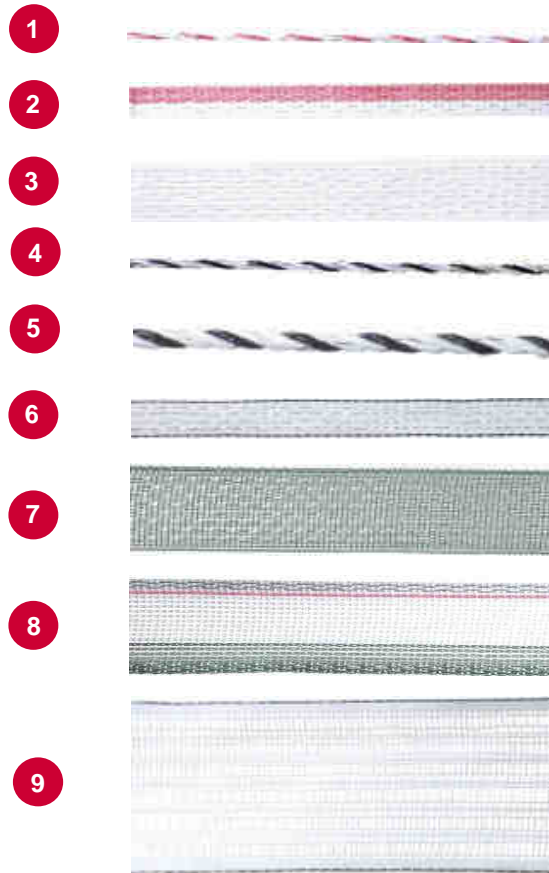
PRODUCT	CODE
 <b>AIR-ZINC BATTERY 9V/60Ah</b>	6059055
 <b>AIR-ZINC BATTERY 9V/130Ah</b> Battery for 9 Volt Olli models	6059130
 <b>DIGITESTER</b> Digital fence tester, incl. 9 V battery	6020020
 <b>SUPER TESTER</b> Fence tester with four LED:s	6020030
 <b>GATE HANDLE</b> Black gate handle, 2 pcs in bag	6051213
 <b>SPRING GATE 4,5 M</b> Handle, spring, gate insulator and one ring insulator. Not recommended for horses.	6051016
 <b>ROPE GATE</b> Flexible rope gate, Rope length 3,2 m. Includes also a ring insulator and a gate insulator.	6051019
 <b>SPRING, 5 pcs</b>	6051015
 <b>ACCESSORY PACKAGE FOR POLYTAPES</b> For connecting 10-40 mm fence tapes. Includes 6 tape connectors, 2 connector pieces for gate handle and 2 m electric wire. All connectors are stainless.	3810951
 <b>ACCESSORY PACKAGE FOR WINTER TAPE</b> For making connections of Olli Winter tape. Includes 3 m connector wire for connecting the energiser, 2 tape connector sets, 2 gate handle connectors and two plastic tape connectors.	3810949
 <b>ACCESSORY PACAGE FOR 100 MM POLYTAPE</b> Includes 4 stainless tape connector pieces, 2 gate handle connectors, 2 tape connectors, wire and instructions.	3810953
 <b>JOINT FOR TAPE 10-20mm</b> 10 pieces in a bag	6050023
 <b>JOINT FOR TAPE 40mm</b> 10 pieces in a bag	6051020

PRODUCT	CODE
 <b>WIRE CONNECTOR 2 mm</b> For max 2 mm wire, 10 pcs.	6050041
 <b>ROPE CONNECTOR 5 mm</b> For max 5 mm rope, 10 pcs.	6050043
 <b>ROPE CONNECTOR 8 mm</b> For max. 8 mm rope, 5 pcs	6050042
 <b>WIRE TENSIONER</b> For steel wire.	6050035
 <b>FENCE ON/OFF SWITCH</b> High voltage on/off switch for the fence	6051025
 <b>LIGHTNING ARRESTOR</b> Protects the energiser from lightnings. Galvanized.	6050095
 <b>Tool for hitting wooden posts to ground</b> Weight 15 kg. Suitable for posts with max. 90 mm diameter.	6050080
 <b>SPOOLING DEVICE</b>	6050055
 <b>EXTRA SPOOL</b>	6051057
 <b>HIGH VOLTAGE CABLE 50m</b>	6051018
 <b>GROUND ROD WITH CABLE</b> 1,0 m long galvanized steel rod with T-profile. Includes 3 m connecting wire.	3810944
 <b>HIGH VOLTAGE CABLE SET 6 m</b> 6 m cable and two tape connectors.	3810945
 <b>HIGH VOLTAGE CABLE SET 12 m</b>	3810946
 <b>5 WARNING SIGNS</b>	6050038

*Olli Shocktecq stands for premium products for permanent installations. Shocktecq products are mechanically strong and have stainless steel parts.*

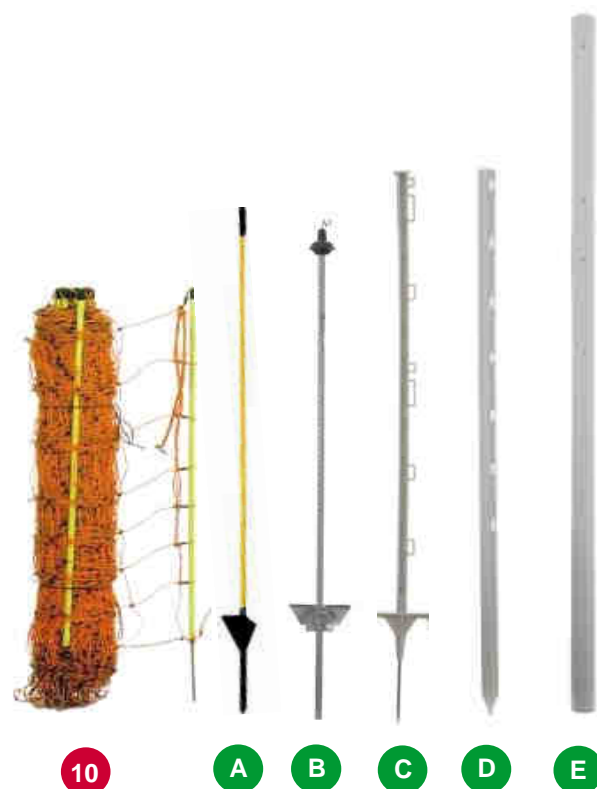
**SHOCKTEQ™**

# Fence posts and wires



PRODUCT	CODE
<b>1 WIRE 250m</b>	6030025
<b>WIRE 1000m</b> Red-white, 2x0,2 mm stainless steel wire +1x0,24mm copper	6030034
<b>2 TAPE 10mm/200m</b> Red-white, 4x0,2 mm stainless steel wire	6031010
<b>TAPE 12mm/200m</b> Red-white, 3x0,2 mm stainless steel wire and 2x0,24mm copper	6031026
<b>3 TAPE 20mm/200m</b> white, 6x0,2 mm stainless steel wire and 3x0,24mm copper	6031028
<b>TAPE 40mm/200m</b> white, 9x0,2 mm stainless steel wire and 6x0,24 copper	6031035
<b>Steel wire 500m</b> Zincd multi-ply fence wire, diameter 1,5 mm.	6030056
<b>4 SHOCKTEQ-WIRE Super-6 200m</b> <b>SHOCKTEQ-WIRE Super-6 1000m</b> Black-white, 6x0,2 mm stainless steel wire	6030033 6030032
<b>5 ROPE 5mm/300m</b> Black-white, 3x0,4 mm stainless steel wire	6032032
<b>ROPE 8mm/200m</b> Black-white, 3x0,4 mm stainless steel wire	6032027
<b>6 White SHOCKTEQ-TAPE 20mm/200m</b> 4x0,4 mm stainless steel wire, reinforced edges	6031029
<b>7 Green SHOCKTEQ-TAPE 40mm/200m</b> 8x0,4mm + 2x0,2mm rst. steel wire, reinforced edges	6031036
<b>8 WINTER TAPE 40mm/200m</b> Green-white, 2 separate conductors, 2x 4x0,4 mm stainless steel	6031019
<b>9 EXTRA WIDE TAPE 100mm/100m</b> 100 mm wide fence tape, 2x7x0,5 mm steel conductors at edges	6031022

<b>10 SHEEP NET 90cm/50m</b> Includes 14 posts	6031020
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PRODUCT	CODE
<b>A GLASS FIBER POST 110 cm</b> <b>GLASS FIBER POST 140 cm</b> Yellow, with two insulators. for 0-20 mm tapes and polywires	6041654 6041655
<b>B STEEL POST 107 cm</b> <b>STEEL POST140 cm</b> Silver colour, with one insulator for wires and thin tapes.	6041653 6041652
<b>C WHITE PLASTIC POST WITH STEEL TIP 105 cm</b> 5 wire holders, for polywires and tapes up to 40 mm	6041656
<b>WHITE PLASTIC POST WITH STEEL TIP 160 cm</b> 8 wire holders, for polywires and tapes up to 40 mm	6041350
<b>D PLASTIC POST 115 cm</b> White, 7 tape holders. For tapes up to 20 mm	6041150
<b>PLASTIC POST 150 cm</b> White, 8 tape holders. For tapes up to 20 mm	6041500
<b>PLASTIC POST 200 cm</b> White, 8 tape holders. For tapes up to 20 mm	6042000
<b>E ROUND PLASTIC POST FOR ROPES 180 cm</b> White polyethylene, Ø 63mm. Holes for 4 ropes. Cap is included	6041800



# Fence Energisers



MODEL	MAX FENCE LENGTH **	MAX OUTPUT ENERGY	LOADED ENERGY	MAX VOLTAGE	POWER SOURCE	FEATURES
Olli 2000	20-250 km	10 J	20 J	9500 V	Mains	Testing features and an LCD display
Olli 1800	20-250 km	9,7 J	18 J	9500 V	Mains	Fence voltage indication with LED
Olli 1200	15-160 km	7,2 J	12 J	8700 V	Mains	Fence voltage indication with LED
Olli 1000	12-140 km	5 J	9,25 J	9500 V	Mains	Testing features and an LCD display
Olli 500	10-120 km	5 J	6,4 J	5700 V	Mains	
Olli 250	7-90 km	2,7 J	4,2 J	5600 V	Mains	
Olli 100	2-35 km	1,3 J	1,5 J	6500 V	Mains	
Olli 160B	7-65 km	1,6 J	1,9 J	6300 V	12 V battery	Three output power modes
Olli 70 B	5-35 km	0,7 J	1,0 J	9800 V	9/12 V	Two output power modes
Olli 50S	2-25 km	0,53 J	0,7 J	9800 V	Solar	Complete package including battery
Olli 30B	1-15 km	0,3 J	0,5 J	9800 V	9/12 V	Two output power modes
Olli 2B	0,2-3 km	0,04 J	0,06 J	9500 V	1,5 V battery	

\*\* The fence length depends on the fencing wire quality, grounding and vegetation that may touch the fence. The given value should mean the total length of the fence conductor(s).



## Olli 2000

Olli 2000 is The most powerful Olli with versatile testing functions.

- Testing of fence voltage
- Testing of grounding
- Display of pulse energy
- Clear LCD display

## Olli 100

The mid power Olli for horse paddocks and short cattle and pig fences as well as pet fences.



## Olli 1800 and Olli 1200

The new Olli power fences. Latest low impedance technology gives the best performance in long fences and difficult conditions. Blink LED indicates the fence voltage

## Olli 160B

A powerful 12 V battery operated energiser for all animals. Three power settings: high, low and automatic mode that switches to low power mode at low light.



## Olli 1000

When you need to ensure that the fence works perfectly but Olli 2000 is too strong. The top model for horse fences. Full testing features. The high power technology of Olli 1000 offers the maximum 5 J performance over a wider range of fence resistance than any conventional energiser.

## Olli 70B

All new 0,7 Joule battery fence for all animals. Use either 9 V battery or and external 12 V rechargeable battery. With deep discharge protection for 12 V. Two power modes



## Olli 500

Low impedance 5 J output power for all animals. The real workhorse for cattle farm fences.

## Olli 50S

Mid power battery fence that is powered by a solar cell. Normal summer conditions keep it running day and night. Maintenance free.



## Olli 250

The most popular Olli for horse fences. 2,7 J output and low impedance technology

## Olli 30 B

All new battery fence for horses and pets. Output energy 0,3 J. Other technical data like Olli 70B



## Olli 2B

1,5 V battery powered compact fence for temporary fences and garden applications.



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