

ET-ROLLER 5

Electric roller for fire hoses up to 5"



INSTRUCTIONS FOR USE

EN

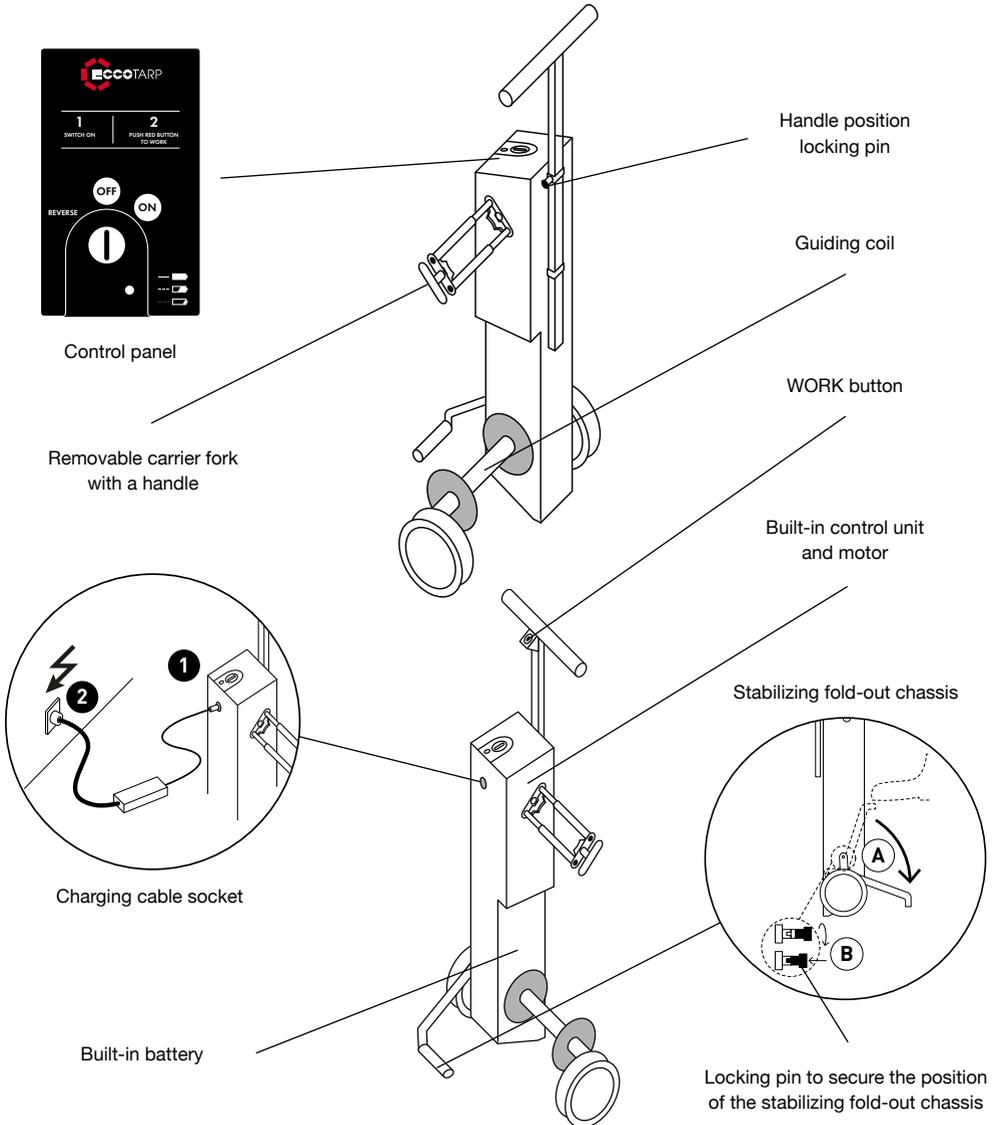


This document „Instructions for use“ (hereinafter manual) is used to get acquainted with the operation and characteristics of the ET-Roller 5 – Electric roller for fire hoses up to 5" (hereinafter the roller or the winder), and describes the manner of its use and possible risks connected with its use.

It contains important information about how to use the device properly so as to avoid injuries and increase its reliability and extend its lifetime.

This document must always be available in the place where the winder is used. Keep it together with the device at all times.

The operator is responsible for using the device safely and in compliance with the instructions in this manual, which applies to any third persons as well. If you have any doubts about operating the winder, please contact the manufacturer or an authorized dealer.



Technical data

Dimensions in use (w × d × h)	480 × 360 × 1080 mm
Dimensions of folded roller (w × d × h)	480 × 270 × 900 mm
Height of roller with handle at the maximum	1360 mm
Package dimensions	740 × 270 × 780 mm
Weight (without fire hose)	23 kg (incl. Li-ion battery), 27 kg (incl. VRLA battery)
Types of fire hoses that can be wound	A, B, C, D, up to 5"

The package includes:

1× ET-Roller 5 – Electric roller for fire hoses up to 5"

1× winder charger (36 V)

1× instructions for use

Safety instructions for use



When using the winder, observe these instructions as well as all the safety notices herein.

1. The winder is only designed for winding and unwinding fire hoses and for squeezing remaining water out of hoses.
2. The winder may only be operated by 1 person (2 persons in the event of unwinding).
3. The winder must be fully charged by the supplied charger before it is used for the first time. The battery reaches full capacity only after several charging cycles.
4. Disconnect the winder from the charger before use.
5. During the winding process, the handle must be held with both hands and the stabilizing fold-out chassis must be secured by a leg.
6. !CAUTION! During winding, there is a risk of injury as a result of clothes or limbs being caught in the carrier.
7. Before the hose is taken away from the carrier, the device must be turned off.
8. !CAUTION! The device is heavy.
9. Do not disassemble or modify the winder.
10. Never drop the device from a height.
11. Do not expose the device to temperatures over 40 °C for extended periods of time.
12. Protect the device from direct sunlight.
13. If the winder is excessively hot, allow it to cool down and only start using it after that.
14. Never throw the device directly into fire.
15. Never immerse the device in water or wash it with water under pressure, and prevent water and moisture from entering it directly.
16. Never attempt to charge a damaged winder.
17. In the event of injury resulting from improper use of the winder take appropriate measures and if necessary seek medical help.
18. The winder must not be handled or operated by children.
19. The device must not be disposed of with household/ municipal waste. When the device is past its lifetime, it must be taken to a waste collection point for environment-friendly disposal or returned to the manufacturer.
20. The manufacturer confirms the product's compliance with EU directives.

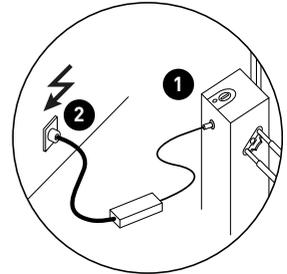
Safety instructions for charging



1. The winder is completely discharged when a slow rhythmical sound signal is heard and the WORK button goes off.
2. Use only the supplied charger type to charge the winder.
3. The range of permissible temperatures for charging is between 0 °C and 40 °C. Outside this temperature range the winder might be damaged or its lifetime might be shortened.
4. No metal or other objects must be allowed to enter the charger socket on the winder.
5. Never charge the winder in a wet or humid environment.
6. Never charge the winder near sources of heat or on flammable surface.
7. Make sure that the mains voltage corresponds to the voltage on the charger's data plate. Otherwise there is a risk of electrical injury.
8. The winder and the charger become warmer during the process. This is normal and it is not regarded as a defect.
9. Never cover the charger or the winder during charging.
10. The winder is fully charged when the red indicator goes off and the green indicator comes on.
11. If the winder is not charged within 5 hours, interrupt the charging process. Begin charging again in 12 hours. If the problem persists, please, contact the manufacturer's service department.
12. If an unusual smell, overheating, colour or shape change or any other abnormalities occur during winder charging/operation, stop the charging process/operation immediately.
13. Never use a damaged charger. If it is damaged, please, send it to the manufacturer for repair or replacement.
14. Never open the charger. If there is a defect, please, contact the winder manufacturer.
15. Battery replacement – the device is supplied with an original battery type 36 V VRLA or 36 V Li-ion. Expected battery lifetime is 5 or more years if used properly. If it is necessary to replace the battery, it can be replaced with a new one by opening the lid of the device marked „battery“. Each new battery is supplied with instructions for its replacement.
16. Safety warning: never open the control unit and motor cover in the upper part of the winder. By opening the cover you lose warranty.

Illustrated charging instructions

1. Insert the charger connector into the proper hole on the winder.
2. Insert the charger plug into a 230 V/50 Hz socket. The LED on the charger lights up red. The winder is fully charged when the red indicator goes off and the green indicator comes on.



Specification of battery types

Accumulator battery	Li-ion	VRLA
Operating voltage	36 V DC	36 V (3×12V) DC

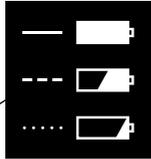
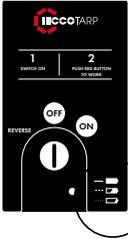
The winder can wind about 4 600 metres of wet A 110 type hose (230 times wound 20-metre hose) when the 36V Li-ion battery is fully charged.

The winder can wind about 3 500 metres of wet A 110 type hose (175 times wound 20-metre hose) when the 36V VRLA battery is fully charged.

Charging station specifications

Charging station	36 V
Mains voltage	88-264 VAC
Charging time	5 h

Winder battery charging indicator



LED is off – battery is fully charged

LED blinks in longer intervals – battery is half discharged

LED blinks in short intervals – battery is almost completely discharged and must be charged

Instructions for Winder Operation



Please, read the safety instructions and this manual before using the winder.

The winder is designed for winding fire hoses of sizes D to A (up to a diameter of 5" and a maximum hose length of 50 m). Thanks to its output it can also wind wet hoses (not filled with water). The winder can also be used for squeezing remaining water out of fire hoses (see "Squeezing remaining water out of a fire hose").

Hoses can be wound in two basic ways:

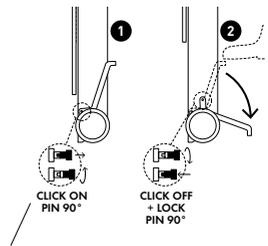
Winding with the winder stationary – STATIONARY method or while the operator walks – WALKING method.

Both methods make it possible to wind the hose from the centre to the end (option 1) or, thanks to the versatile carrier, from the beginning to the end (option 2).

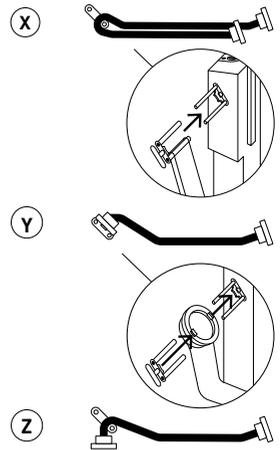
Although the operation is intuitive, recommended procedures for both alternatives are described below.

1 Preparation for winding:

1. The winder should be fully charged by the supplied charger before it is used. The winder is designed so that it can be permanently connected to the charger while stored. Use strictly the charger supplied by the manufacturer.
2. Disconnect the winder from the charger before use. Extend the handle into the optimal position and transport the winder to the place of operation (winding).
3. Tilt and secure the stabilizing fold-out chassis: release the locking pin and turn it by 90°. That prevents the winder position from being automatically re-locked. Tilt the fold-out chassis so that it is stabilized and turn the locking pin back by 90° and let it slide into the locking hole.
4. Drain the water out from the hose. If, as a result of uneven surface, the hose is full of water or contains large rest of water after firefighting intervention, see "Squeezing remaining water out of a fire hose" on p. 11.



5. Prepare the hose in the appropriate position according to how you want to wind it for storage – see the instructions below (“option 1” or “option 2”).
 - 5.1 Option 1: The hose can be folded in half and pulled by the folded end towards the winder (see figure X). When folded, both parts of the stretched hose must be put on each other and aligned and the metal couplings must be positioned in such a way that the coupling of the upper half lies over the end of the lower half of the hose. The rule for the overlap length is 0,5 m of overlap per each 10 m of folded hose (e.g. with a 20-metre hose – 10-metre after being folded – the upper coupling will overlap the lower one by 0,5 m).
 - 5.2 Option 2: Make the complete length of the hose straight. An A or B size hose will be reliably wound if the coupling is put into the jaws of the carrier fork, which will hold the protrusions on the flange (see figure Y). If thinner, C or D size hoses, are to be wound, simply pass the coupling through (see figure Z).



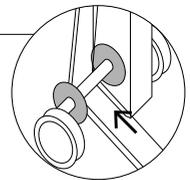
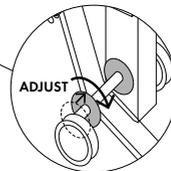
6. Pass the end of the hose or the end of its folded part under the guiding coil.
7. Remove the removable fork from the carrier and put the end or folded centre of the straightened, aligned hose on it according to one of the alternatives described in section 5 hereof.
8. Using a black plastic plate, adjust the width of the guiding coil to the width of the hose by turning it on the core of the coil.
9. Switch the winder to the ON position on the control panel.
10. Then follow one of the ways below (**2** or **3**)



Hose wound according to fig. X – see option 1.



Hose wound according to fig. Y – see option 2.



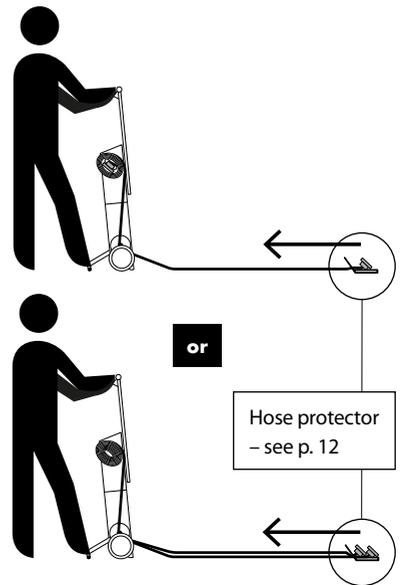
2 Hose winding **STATIONARY METHOD** (winder stands and the hose approaches during winding)

CAUTION! During this procedure, the end of the hose, close to the coupling, which is moved on the surface, may become chafed through. That is particularly risky in the case of hard surface, such as concrete, paving, etc. Therefore, we recommend using a “hose protector” (see optional accessories on page 12) for the free part of the hose end.

- 2.1 Use both hands to get hold of the winder handles and press the locked tipping part of the stabilization chassis to the ground in the lower position with your right foot. Turn the switch on the control panel clockwise into the ON position. The control features will be illuminated in red and the winder is ready for operation.
- 2.2 Push the WORK button on the winder handle.
- 2.3 The winder starts winding the hose at a speed that gradually decreases so that the winding speed is safe even with increasing diameter of the winding. Towards the end of the winding process, when the couplings get close to the lower guiding coil, it is recommended that the hose should be wound in

a controlled manner by pressing the WORK button intermittently until the couplings come safely close to the guiding coil. After that the hose couplings must be manually passed under the guiding coil (tilting the winder to a side in the case of the largest hoses) and with extreme care, the rest of the hose can be wound by pressing the WORK button shortly. If the "hose protector" is used during winding, it must be removed from the hose end before passing the hose under the guiding coil so that the winder does not get damaged.

Note: The WORK button can be released at any time during operation in order to stop winding. After it is pushed again, the winder continues working with the lower revs which it had when it was stopped (see Graph 1).

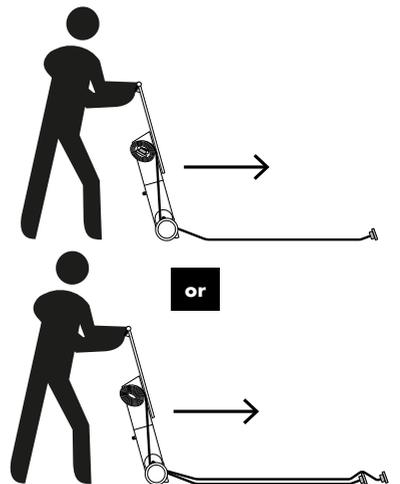


- 2.4 When winding is completed, turn the winder OFF.
- 2.5 Remove the wound hose with the removable part of the carrier from the winder and put it away for further handling. Remove the removable part of the carrier from the centre and put it back on the carrier. The hose is now ready to be stored or used.
- 2.6 When you have finished working with the winder, connect it to the charger so that it is available with its battery fully charged at all times. After the battery is completely charged, the charger is automatically turned into standby mode, which prevents the battery from self-discharge.

3 Hose winding WALKING METHOD (the user walks forward with the winder and the hose is stationary on the ground while being wound)

If you need to protect the hose against damage during winding without using the "hose protector", it can be wound when the user is walking forward with the winder and winding the lying hose.

- 3.1 Tilt and secure the stabilizing fold-out chassis: Release the locking pin by hand, turn it 90° to prevent it from engaging automatically again and locking the position. Tilt the chassis into the transport position and secure it by turning the pin 90° and letting it slide into the locking hole.
- 3.2 Turn the switch on the control panel clockwise into the ON position. The control features will be illuminated in red. Press the illuminated WORK button in the middle of the handle and start walking with the winder immediately towards the free end of the hose. Adapt your walking speed to the winding speed.
- 3.3 The winder starts winding the hose at a speed that gradually decreases so that the winding speed is safe even with increasing diameter of the winding. Towards the end of the winding process, when the



couplings get close to the lower guiding coil, it is recommended that the hose should be wound in a controlled manner by pressing the WORK button intermittently until the couplings come safely close to the guiding coil. After that the hose couplings must be manually passed under the guiding coil (tilting the winder to a side in the case of the largest hoses) and with extreme care, the rest of the hose can be wound by pressing the WORK button shortly.

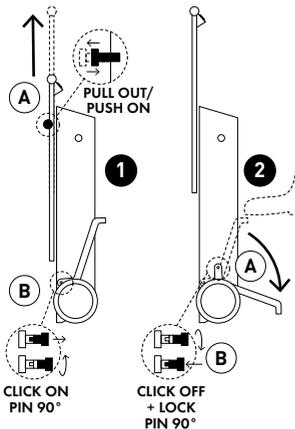
If the "hose protector" is used during winding, it must be removed from the hose end before passing the hose under the guiding coil so that the winder does not get damaged.

Note: The WORK button can be released at any time during operation in order to stop winding. After it is pushed again, the winder continues working with the lower revs which it used when it was stopped (see Graph 1).

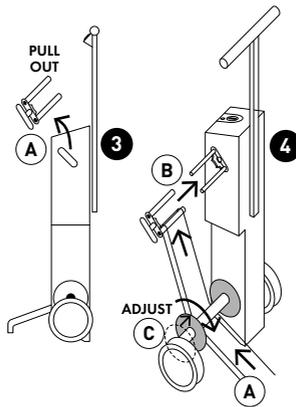
- 3.4 When winding is completed, turn the winder OFF and tilt the stabilizing fold-out chassis so as to secure the winder while removing the hose from the carrier.
- 3.5 Remove the wound hose with the removable part of the carrier from the winder and put it away for further handling. Remove the removable part of the carrier from the centre and put it back on the carrier. The hose is now ready to be stored or used.
- 3.6 When you have finished working with the winder, connect it to the charger so that it is available with its battery fully charged at all times. After the battery is completely charged, the charger is automatically turned into standby mode, which prevents the battery from self-discharge.

Illustrated instructions for winder operation

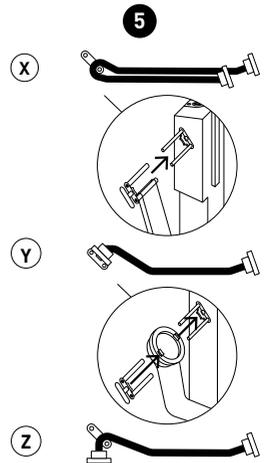
Tilting and securing the stabilizing fold-out chassis



Placing hose into hose carrier



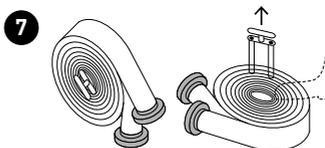
Manners of securing hose in carrier



Winder activation



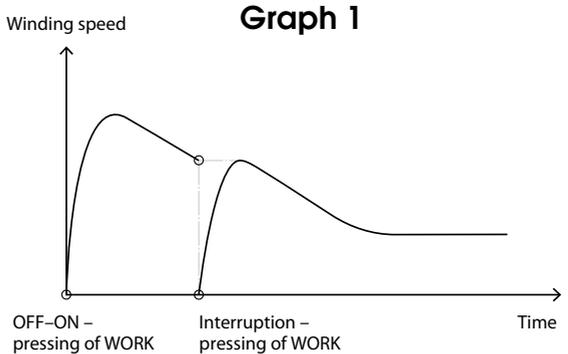
Removing carrier fork from wound hose



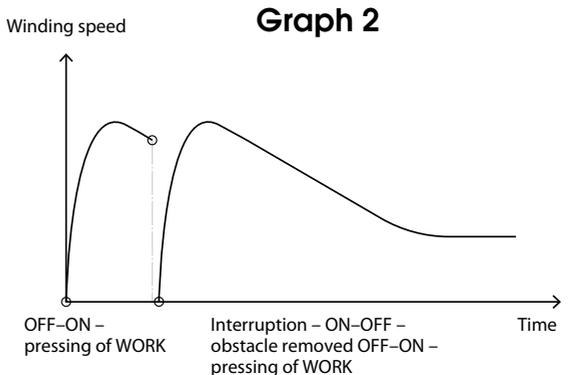
SAFETY FUNCTIONS OF THE WINDER

Certain safety features influence some of the winder's reactions during the work:

1. Stopping the winding – If the motor becomes overloaded unexpectedly (e.g. as a result of the hose being obstructed or stepped on), the winding process is interrupted immediately, the WORK button starts blinking and a fast sound signal is heard. If you only release the winder's WORK button (without turning the main switch to the SWITCH OFF position), then, after the cause of motor overloading is removed and WORK is pushed again, the winder continues working with the revs which it used at the time of being stopped (see Graph 1). However, in this case of forced interruption, the controlling software needs a few seconds before it can resume the winding process.



2. Motor overheating – The system has a safety feature that prevents overheating. If the motor becomes excessively hot (e.g. during work under extreme temperatures), the battery is automatically disconnected. The reason is battery safety. Place the machine out of reach of the heat source (e.g. in shade). The machine can be turned on again after it cools down.



3. The OFF-ON switch and the WORK button – The winder is fitted with a smart revs control feature for your convenience and safety. Every time the OFF-ON switch is used, the “Winding” program is activated (see Graph 1 and 2). It shows the course of the carrier's revolving speed. That happens so that the winding revs are fast with a small spool diameter and the winding speed remains approximately the same and safe while the diameter becomes larger. When winding is stopped – the WORK button is released – the winding program is interrupted. When WORK is pressed again, the winding speed returns to the previous speed in a few seconds (see Graph 1).
4. Interrupting the winding process by using the OFF-ON button – It is clear from the description above that if the winding process is interrupted and the OFF-ON button is used, the winding function starts again at the beginning. That means that if the winding process is interrupted and the winder is turned OFF and then ON again, the highest revolution speed is activated by pressing the WORK button (see Graph 2). In spite of that it is still possible to work safely: you can control the revs by pressing WORK repeatedly.

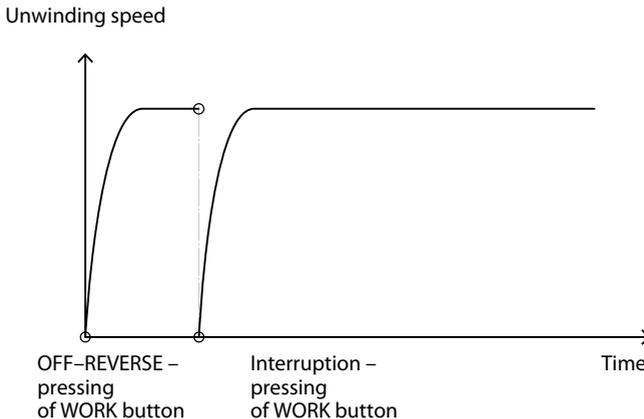
Smart winding

Your winder has a smart motor control which allows you to adjust the fire hose winding speed. The reason is your convenience and safety as well as battery protection.

1. How does it work? After WORK is pressed, the motor begins winding at zero speed. Then it switches to the highest revs very quickly and while the hose is gradually being wound, it starts lowering the revs so that with the increasing diameter of the wound hose, the winding speed for the free end of the hose remains safe.
2. Release the WORK before completing the winding process and by pressing it intermittently you will achieve the lowest safe winding speed (see Graph 1).
3. Overloading – if the hose gets stuck or stepped on, or for other reasons, the winding force may become excessively high. In such a case, the system automatically disconnects the battery and warns the user by a fast warning sound and by the WORK button blinking. After the WORK button is released and the obstacle removed, the machine is ready to be used again in a few seconds.
4. Overheating – the machine has a recommended working temperature range. When the highest safe temperature (60 °C) is exceeded, the battery is automatically disconnected from the machine. The reason is battery protection against overheating. After cooling down, the machine is ready to be used again.
5. Battery discharged – if battery capacity decreases under the safety limit, the battery is disconnected from the device, a slow warning signal is heard and the WORK button's light indicator goes off. The reason is battery protection against destruction. After the battery is recharged, the machine is ready to be used again. The machine comes with the original charger, which can fully recharge the battery in about 5 hours. The machine is designed in such a way that the charger can be connected to the winder permanently (charging is automatically stopped when the battery is fully charged).

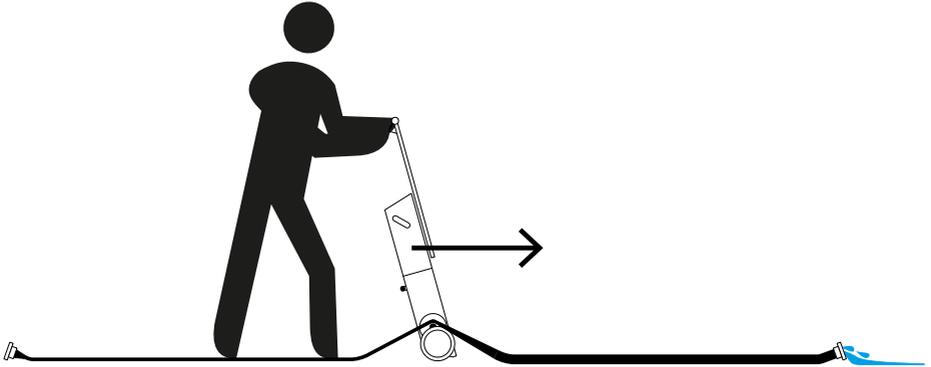
REVERSE function

By turning on the REVERSE function on the control panel and pressing the WORK button, the reverse run of the carrier is activated. This function is mainly used for controlled unwinding of an already wound fire hose. Two persons are needed for this function to be used. One person controls the winder (switching on REVERSE and pressing WORK) while the other person grips the metal couplings of the wound hose and moves away from the winder in accordance with the winder revs. When this function is used (both with the unwinding interrupted and uninterrupted), the fire hose is unwound at high speed all the time (see Graph below). Therefore, it is necessary to be extremely careful.



Squeezing remaining water out of a fire hose

1. The winder must be turned off – the OFF position on the control panel.
2. Pass one end of the hose over the lower guiding coil so that you can step on this hose end.
3. If the stabilizing fold-out chassis is tilted out, tilt it down so that the winder can stand on it without being supported.
4. Tilt the winder towards yourself and proceed slowly with the discharging (downhill, if possible) so that the hose is rolled over the coil, which pushes the water in the hose forward, towards the other end, where the water flows out of the hose. The process of stretching the hose over the coil and of the water flowing out can be intensified by walking on the hose throughout the process.
5. Make sure that no objects that might prevent the water from flowing out lie on the hose during the process.
6. After the water discharging process is finished, the hose can be placed on the removable carrier fork and wound into shape for storage as described in the “Instructions for winder operation” chapter.

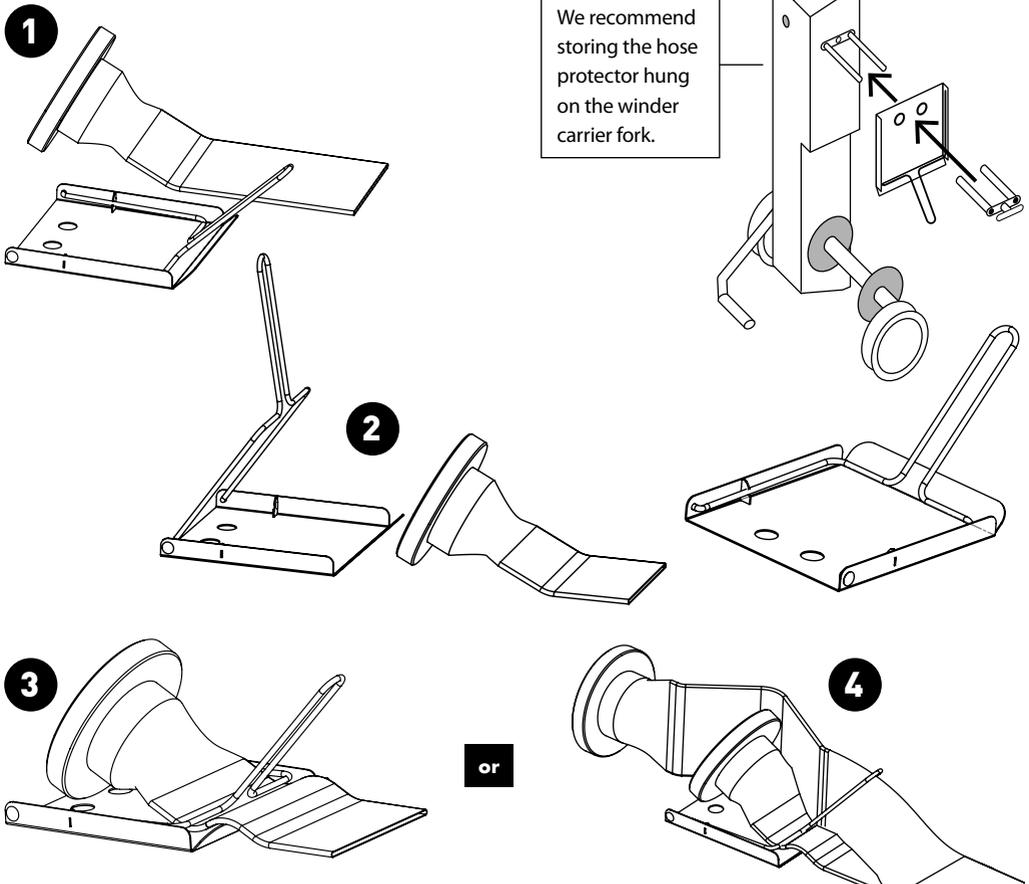


Instructions for winder charging and storing

1. Store the winder in a dry place.
2. If the winder is not to be used for a long time, it should be stored at room temperature (19–23 °C).
3. The winder system is designed in such a way that the charger can be connected to it permanently and the battery is safely recharged without any risk of damage. As a result, the charger can be connected during storage as well.
4. When the winder is completely discharged, the system is automatically disconnected from the battery so that the battery is not completely destroyed. Therefore the battery must be recharged as soon as possible.
5. If stored for a long time without the charger connected to it, the battery must be fully recharged once a year so as to prevent it from being totally discharged.

Recommended optional accessories

Hose protector for hoses of up to size A 110 (5")	Material	Dimensions (w × l × h)
	stainless steel	228 × 352 × 160 mm



Important contact information

Manufacturer and qualified service:

Metal Arsenal s.r.o.

Poděbradova 1920

289 22 Lysá nad Labem

Czech Republic

info@eccotarp.com

T: +420 737 802 153

Repair

Any repair work must always be done by the manufacturer's qualified personnel. In order to report any faults, spare parts orders or complaints, please contact only our qualified service department.

Warranty conditions

The warranty period is stated in the warranty certificate, which is delivered with the product. The warranty period is 24 months and begins on the day indicated in the warranty certificate. The warranty does not apply to the normal wear and tear (e.g. gradual decrease in battery capacity) or to damage caused by improper use or non-compliance with the information provided in these Instructions for Use.

Disposing of a damaged device or its parts

The device or its parts must not be disposed of with household/municipal waste. At the end of its lifetime, the device must be taken to a waste collection point for environment-friendly disposal or returned to the manufacturer. A charger, that is past service, must be taken to an electric waste collection point or returned to the manufacturer.

EU DECLARATION OF CONFORMITY No. 01032020/M

Metal Arsenal s.r.o., Poděbradova 1920, 289 22 Lysá nad Labem, Czech Republic, hereby declares, at its sole liability, that the following product

ET-ROLLER 5

Electric roller for fire hoses up to 5"

(A winder intended for winding fire hoses with couples of the maximum size of A110 (5") and maximum length of 50 m. It includes a 36V DC Li-ion or VRLA battery and a 100–240V AC charger.)

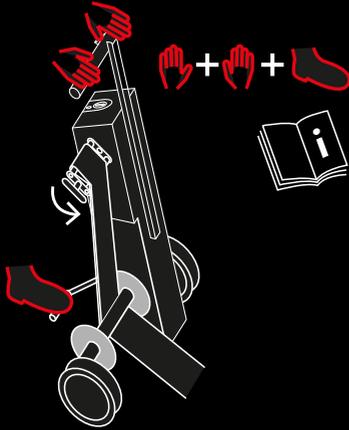
complies with applicable harmonized standards of the European Union.

The above is verified according to Government regulations no. 118/2016 Sb., which is equivalent to a Council Directive 2014/35/EU Government Regulation no. 117/2016 Sb., which is equivalent to a Council Directive 2014/30/EU, ČSN EN 60335-1 ed. 2, ČSN EN 61000-6-3 ed. 2, ČSN EN 55014-1 ed. 4.

Pictograph meanings



Observe the Instructions for use for ET-Roller 5.



During the winding process, the handle must be held with both hands and the stabilizing fold-out chassis must be secured by a leg.

!CAUTION! During winding, there is a risk of serious injury as a result of clothes or limbs being caught in the carrier.

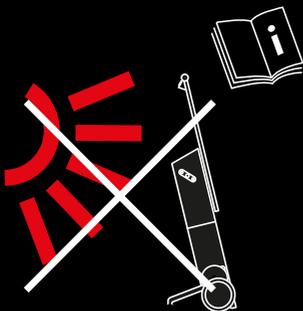
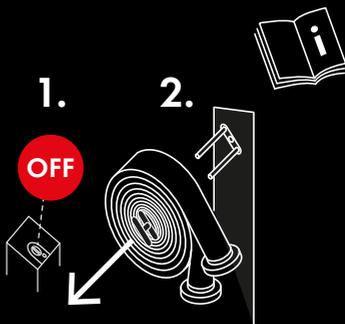


Do not wash the machine with water under pressure.



The winder may only be operated by 1 person.

Before the hose is taken away from the carrier, the device must be turned off.



Protect the device from direct sunlight and do not expose it to temperatures higher than 40 °C for extended periods of time.



!CAUTION! Indicates imminent danger. Not observing this warning may cause death or serious injury.



Confirmation of the machine's compliance with EU regulations.

Before using the winder, read all the safety warnings in this manual. The illustrations in this manual may not fully correspond to the supplied product. Their purpose is to help you understand the text better. The content of this manual may be changed without prior notice.