

## Product Description

Transfer Motor Likorall ES is intended for use with lift units Likorall 242 ES, 242 ES R2R, 243 ES and 250 ES, which are equipped with a special outlet for connection of the transfer motor.

With a transfer motor, Likorall is equipped for motorized travel along the rail system.

This is used, for example, to enable the patient to move

independently in the lift system. In such cases, the patient should always be provided with a personal alarm to be able to call for assistance if necessary.

Other application areas include situations in which the lift must be operated in areas that afford limited space and access for the caregiver.

*In this document, the person being transferred is referred to as the patient and the person helping them is referred to as the caregiver.*

**△ Caution triangles are used to warn of situations that demand extra care and attention.**

### **IMPORTANT!**

Read instructions for the lift and accessories carefully before use. Lifting and transferring a person always presents a potential risk. A thorough understanding of the contents of the instruction guide is essential.

Only trained personnel should use the equipment.

If you have questions, please contact Liko or your local Liko representative.

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## △ NOTE!

This instruction guide contains important information about the use of the product.

All personnel who use this product must be thoroughly familiar with the contents of this instruction guide.

Remember to keep the instructions where they are easily accessible for users of the product.

## Safety Instructions

### Before using for the first time, make certain that:

- the lift unit and transfer motor have been installed according to the assembly instructions
- the end stops are securely installed on the rail
- lifting devices are properly connected to the lift
- you have read and understood the instruction guides for the lift unit and lifting accessories
- personnel using the lift have been informed of the correct operation and use of the lift and accessories
- you have checked to ensure that lifting accessories are not damaged
- the correct lifting accessory has been chosen, with respect to type, size, material and version in relation to the needs of the patient

### Before lifting, always make certain that:

- the lift strap is not twisted or worn and can be run freely in and out of the lift unit
- lifting accessories are not damaged
- the lifting accessory is correctly and securely applied to the patient, so that there is no risk of personal injury
- the lifting accessory is correctly applied to the lifting equipment
- the sling's strap loops are correctly attached to the slingbar before the patient is lifted from the underlying surface, but when the sling straps are properly extended
- the patient, if using Likorall with a transfer motor alone, is provided with a personal alarm
- the transfer motor can be run in both directions



Transfer Motor Likorall ES has been tested by an accredited testing institute and complies with the requirements for MDD Class 1 products (MDD 93/43/EEC). Transfer Motor Likorall ES together with Liko Likorall lift units complies with the requirements of EN ISO 10535, IEC 60601-1, EN 60601-1-2, UL 60601-1 and CAN/CSA C22.2 No. 601.1.

## Maximum Load

Different maximum loads may apply to different products on the assembled lift system: lift unit, transfer motor, slingbar, sling and any other accessories used. For the assembled lift system, including accessories, the maximum load is always the lowest maximum load rating of any of the components. For example: A Likorall that is approved for 200 kg (440 lbs) can be equipped with a transfer motor that is approved for 250 kg (550 lbs). In this case, the max. load of 200 kg (440 lbs.) applies to the assembled lift system. Study the markings on the lift and lifting accessories, and contact your Liko representative if you have any questions.

**Max. load: 250 kg (550 lbs.)**

## Technical Data

**Max. load:** 250 kg (550 lbs.)  
**Speed of travel:** 15 cm/s (5.9 inch./s)  
**Electronics:** Uses Likorall's battery and electronics, 24 V, 5 A.  
**Dimensions of transfer motor:** WxLxH: 148x233x126 mm (5.8x9.2x5.0 inch.).  
 Built-in dimension: 65 mm (2.6 inch.).

**Material:** Aluminium and plastic  
**Degree of protection:** IP 43



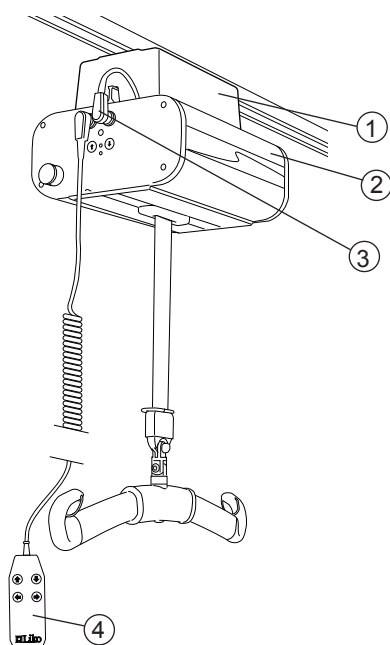
The device is intended for indoor use.



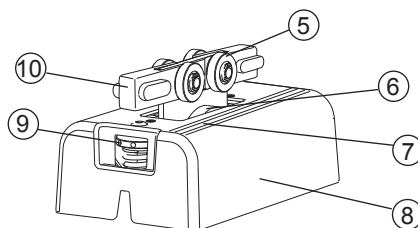
Type B degree of protection against electrical shock.

## Definitions

Likorall with transfer motor

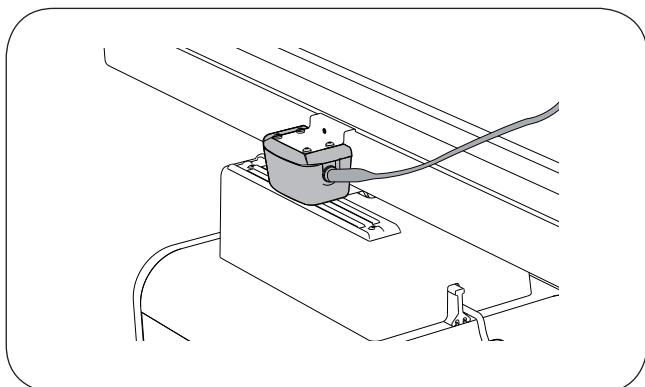


Transfer motor



1. Transfer motor
2. Lift units Likorall 242 ES/242 ES R2R/243 ES/250 ES
3. Connection cable for transfer motor
4. Handcontrol with 4 buttons
5. Wheel tread
6. Drive wheel
7. Contact plate
8. Plastic housing
9. Tension wheel
10. Damper

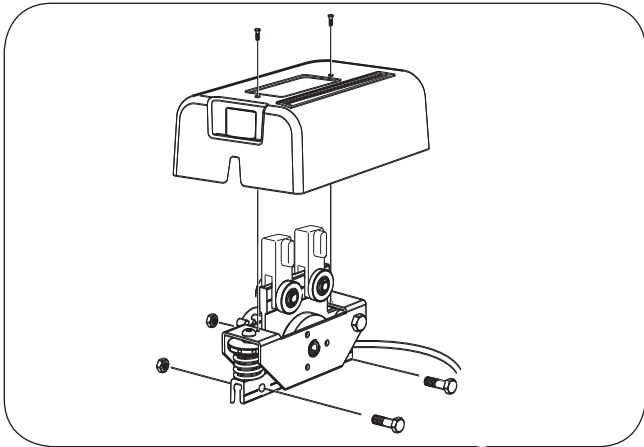
## Accessories



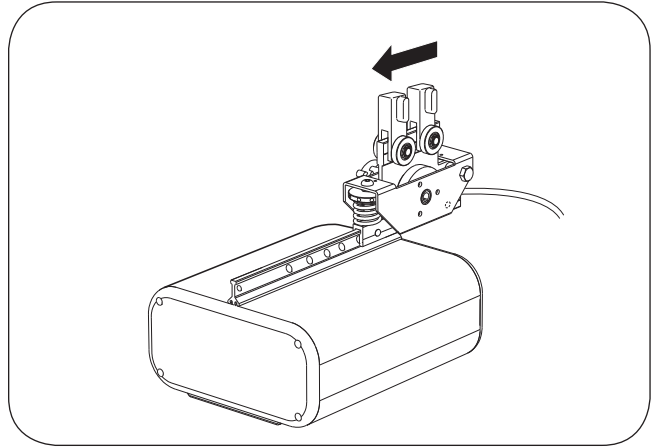
### Multistation Prod. No. 3126110

As an alternative to battery charging via the handcontrol, the Likorall with Transfer Motor can be charged via a Multistation. The Multistation is installed on the rail system. By parking the lift unit at the charging position under the Multistation (i.e., so that the Multistation is aligned with the contact plate on the transfer motor), the batteries can be charged.

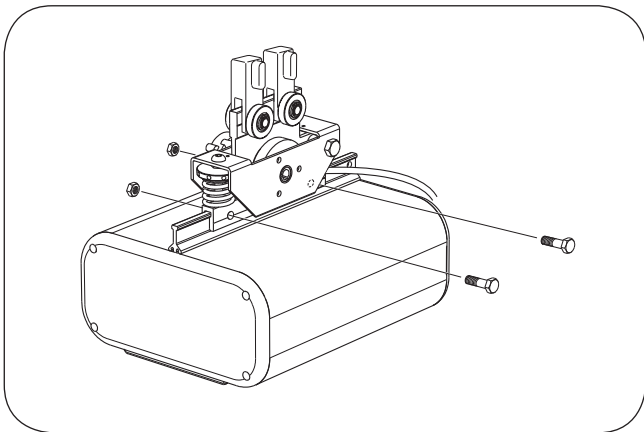
## Assembly



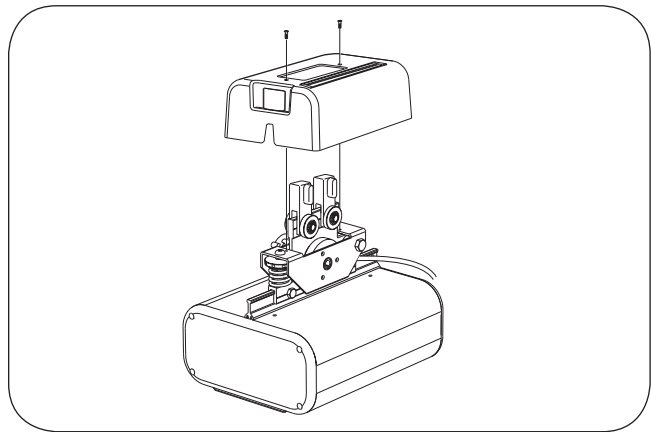
1. Raise the dampers. Loosen the screws (2 pcs. M4x5) on the outside of the transfer motor housing, and then remove the housing. Loosen the screws (2 pcs. M8x25) with lock nuts (2 pcs. M8) mounted on the profile under the transfer motor.



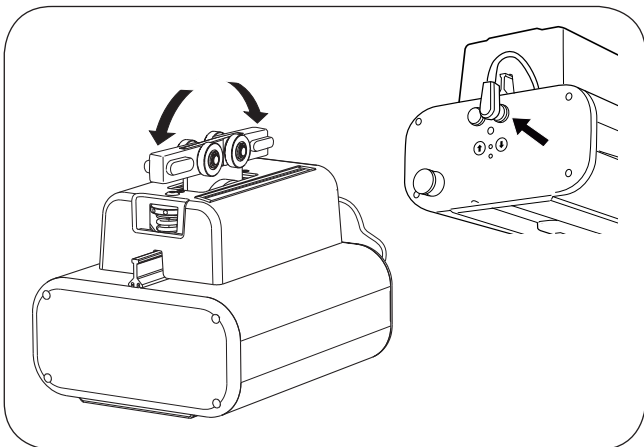
2. Insert the transfer motor on the Likorall's mounting rail. The connection cable must be on the same side as the end plate with contact on the lift unit.



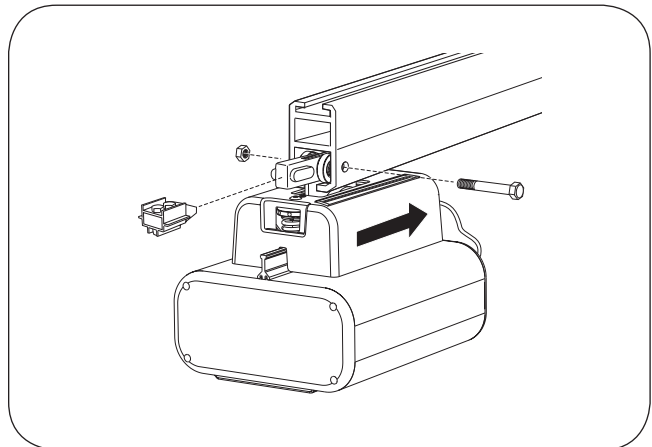
3. Centre the transfer motor on the Likorall and insert screws (2 pcs. M8x25) with M8 lock nuts (which were removed in step 1) in the intended holes.



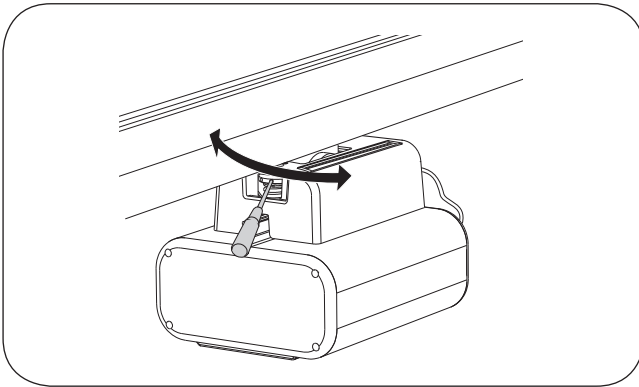
4. Replace the plastic housing on the transfer motor and affix with screws (2 pcs. M4x5), which were removed in step 1.



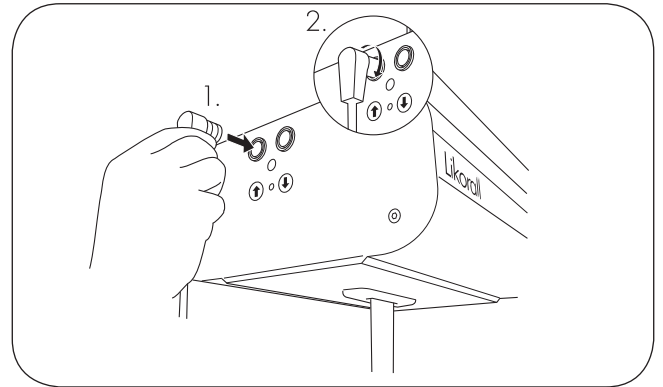
5. Lower the dampers and connect the cable to the contact on the Likorall.



6. Guide the Likorall with transfer motor onto the rail, and then mount the end stops on the rail.



7. Apply the intended patient-weight load to the Likorall. Adjust the tension wheel until the desired degree of friction between the drive wheel and rail is achieved. The tension wheel is adjusted with the aid of a screwdriver. To increase friction, move the tension wheel to the right; to reduce friction, move it to the left.

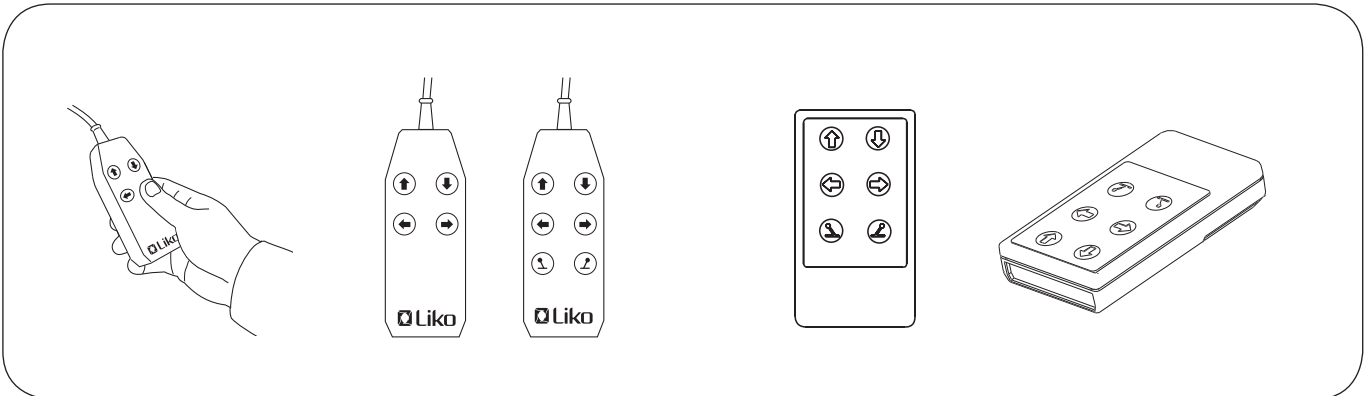


8. Connect the handcontrol to the Likorall.

**After assembly, check to ensure that:**

- the lift unit and transfer motor functions correspond to the markings on the handcontrol;
- the transfer motor moves neither too freely nor too heavily; adjust the tension wheel (see point 7).

## Operation



### Operation

The Likorall and transfer motor are controlled via light pressure on the buttons on the handcontrol. Arrows mark the direction of travel. Travel stops when the button is released. Handcontrols for the Likorall with transfer motor have either four or six buttons. Travel along the rail is regulated via pressure on the ← respective → button. Buttons ↑ and ↓ are used for control of lifting motion (up/down). Buttons ↙ and ↘ are used to control switches.

### Handcontrol Remote IR Prod. No. 3126060

All models of Likorall ES can be equipped with a wireless handcontrol (IR). The handcontrol with IR control has six buttons and functions exactly as the cable-connected handcontrol (see explanation to the left).

The handcontrol normally functions within a radius of 2-5 metres from the lift unit, depending on the angle between the handcontrol and IR receiver on the end plate of the lift unit.

The Handcontrol Remote IR is equipped with batteries that should be changed periodically (2 pcs. AAA, LR03).

# Care and Maintenance

To ensure trouble-free operation, certain components should be checked each day the Likorall with transfer motor is used.

- Check the lift system for any signs of external damage.
- Check the fixture of the slingbar.
- Check the lift strap for wear, and ensure that the strap is not twisted.
- Check the function of the safety latches.
- Check the control function of the lift movement.
- Check to ensure that the lifting height is properly adjusted and that the emergency lowering device functions.
- Charge the batteries each day the lift is used and check to ensure proper charger function.
- Ensure that the transfer motor can be run in both directions.
- Check the friction between the drive wheel and rail.

When necessary, clean the lift with common surface cleaners or disinfectants. **NOTE! Do not use cleaning agents that contain phenol or chlorine, since these can damage aluminium and plastic materials.**

## Inspection

The Likorall and transfer motor should undergo thorough inspection for wear at least once per year. Inspection must be performed according to the Liko service manual and by authorized personnel.

## △ IMPORTANT!

Repairs and maintenance may only be carried out by personnel authorized by Liko using original Liko spare parts.

## Transport and storage

During transport or when the Likorall and transfer motor are not in use for a long period, the emergency stop should be pressed in. The Likorall and transfer motor must be stored at a temperature above the freezing point and at normal relative humidity (not exceeding 60 %).

## Service agreements

Liko invites you to sign a service agreement for regular maintenance and testing of your Likorall system.

Liko's products undergo continuous development, which is why we reserve the right to make product changes without prior notice. Contact your Liko representative for advice and information about product upgrades.

## Recycling

For instructions on how the Likorall and transfer motor should be recycled, please visit our website [www.liko.com](http://www.liko.com).

## Made in Sweden

*Liko is quality certified according to ISO 9001 and its equivalence for the medical device industry, ISO 13485. Liko is also certified according to environmental standard ISO 14001.*



A  Company

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