

Assembly instructions

Creating
Intelligence
for adjustable
furniture.

SLIMdrive

SLIMdrive-500

Document Rev1



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1 Preface

Dear Customers and Business Partners,

Thank you for choosing one of our products and putting your trust in *LOGICDATA Electronic & Software Entwicklungs GmbH* – hereafter referred to as LOGICDATA. With this actuator, you have a product incorporating the latest technical advances with respect to safety standards.

The actuator, SLIMdrive-500, is for the electrical height adjustment of tables. This document should enable assembly personnel an installation free from hazards. Assembly personnel must always, therefore, have this document available to them. The document has to be complete and clearly legible. Pay attention to the information in this document in order to avoid dangerous situations and to prevent any damage to the actuator.

LOGICDATA is not liable for technical or printing errors in this document. Equally, no liability can be accepted for damages resulting directly or indirectly from delivery, performance, or use of this document.

Important Note

Once the SLIMdrive-500 actuator has been built into a table, a risk analysis and evaluation has to be performed by the table manufacturer. The table manufacturer is also responsible for the certification of the table.

1.1 Identification

The actuator can be identified by its type plate.

1.2 Support

If you experience technical difficulties, please contact our support team:

Tel.: +43 (0)3462 5198 0

Fax: +43 (0)3462 5198 530

Email: office.at@logicdata.net

Please make sure that you include the product name and its revision number as given on the type plate.

1.3 Liability

The purpose of this documentation is to describe the product's properties, it is not a guarantee of warranty.

LOGICDATA does not accept liability claims for damages caused from:

- Improper use or handling of the actuator
- Disregarding the documentation
- Unauthorized modifications to the actuator
- Misuse or misapplication of the actuator

- Operating the actuator when it is already damaged
- Insufficient monitoring of machine parts which are subject to wear and tear.
- Repairs or repair attempts performed incorrectly
- Unauthorized and negligent changes to operating parameters
- Catastrophic events, effects of foreign objects, and natural disasters

1.4 Target group and background Knowledge

This assembly guide is intended for technicians and assembly personnel of the actuator. Each table manufacturer should decide on who is best suited to fit the actuator based on the following requirements.

- Technical knowledge
- Experience in installing and assembling electric height-adjustable table systems.
- Having read and understood this documentation

1.5 Policy

The actuator has been shipped from the factory in perfect working order and extensive measures to assure safe technical operation have been taken. The actuator corresponds to state-of-the-art technology and complies with all relevant health and safety requirements. Nevertheless, hazards can arise by incorrect operation or inappropriate use.

2 Safety

2.1 Symbols and signal words

⚠ DANGER Safety advice with the signal word DANGER indicates an immediate danger which, if not avoided, will result in death or serious personal injury.

⚠ WARNING Safety advice with the signal word WARNING indicates a dangerous situation which, if not avoided, could result in personal injury or serious damage to property.

⚠ CAUTION Safety advice with the signal word CAUTION indicates a potentially hazardous situation which, if not avoided, is likely to result in damage to property.

NOTICE

This symbol refers to explanatory notes giving supporting information about installation, operation or maintenance, and repairs.

2.2 General Safety Regulations and Legal Obligations

Please pay attention to the following safety regulations when assembling the actuator:

- The actuator may only be operated if it is in good working order.
- It is not allowed to remove, change, bridge, or bypass any components that provide protection, safety, or monitoring.
- It is not allowed to reconstruct or modify the actuator without the written approval of LOGICDATA.
- Use only original spare parts when making repairs.
- Only qualified personnel are allowed to carry out work on the system.
- Operation of the actuator is governed by national health and safety legislation.
- Only work on the hardware when it has been disconnected from the main power supply.
- Make sure that any instructions which were visible on delivery can be easily read. Damaged instructions should be replaced immediately.

2.3 Risk Analysis and user documentation

The manufacturer that has mounted the actuator is required to perform both a risk analysis and an evaluation of the electric height-adjustable table. Any measures to reduce risk derived from the results should be implemented by the manufacturer before placement on the market. Furthermore, the manufacturer is obligated to provide user documentation for the height-adjustable table.

2.4 Residual hazards

Even with the utmost care when manufacturing and mounting the actuator in addition to strict adherence to all relevant safety measures, there can still be residual hazards, which a risk assessment would evaluate.

⚠ DANGER Electrical hazard

When the actuator is connected to the power supply, electrical power is applied to the connectors and the inner parts of the actuator. Contact with live components can cause severe injury.

Always comply with the following safety rules to avoid injury:

- Never open the casing of the device under any circumstances, and do not attempt to repair or modify the device.
- Only use the provided cables.
- Never use the device with a damaged cable or plug.
- Never immerse the device into any liquid. Keep the cable and the actuator away from hot surfaces.

⚠ WARNING Risk of crushing or pinching during operation

While adjusting the height of the desk, there is a high risk of crushing or pinching between the desk and objects under, above or next to the desk.

Make sure that the danger area is clear of people, pets or obstacles! The handset to control the actuator may only be installed in a position where the entire danger zone is visible during operation.

⚠ CAUTION **Damage caused by ESD**

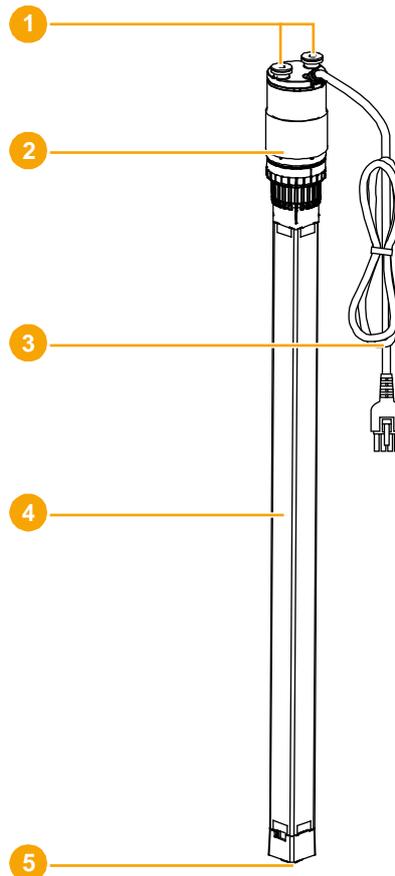
Electrostatic Discharge (ESD) can cause immediate or latent damage to electronic circuits. Please note that we cannot accept any liability for damage caused by ESD. To avoid damage of electrical components by ESD, ensure that the static electricity of your body is diverted permanently before you touch any part of the actuator or cable. Wear a wrist band with grounding cable during the unpacking and installation. Only handle the product at an ESD-protected workplace.

3 Product description

The SLIMdrive-500 actuator is made up of a motor, connecting cable, and a spindle system. The actuator always has to be mounted in such a way that the motor is at the top, placed directly beneath and perpendicular to the table.

3.1 Product Overview

Figure 1: Actuator components



(1)	Motor-sided mounting plate including screws and rubber washers
(2)	Motor
(3)	Connection cable
(4)	Spindle system
(5)	Spindle-sided mounting plate

3.2 Intended Use

SLIMdrive-500 may only be used for the electrical height adjustment of tables. It may only be fitted into tables that adhere to the specifications which were set out jointly by LOGICDATA and the table manufacturer. The actuator may only be installed and operated by qualified personnel. Furthermore,

the actuator may only be used after they have checked the adjustable table, as a whole, for proper and safe operation.

Careless use or improper operation can result in personal injury and/or damage to the actuator as well as the table. Furthermore, by failure to comply with these instructions of intended use, liability and warranty claims shall be excluded. The actuator should only be operated under the conditions of use described in this documentation.

Reading the datasheet is just as obligatory as reading this document. If you do not have this datasheet, request it from LOGICDATA.

4 Tube Design

The position of mounting holes and space required for the SLIMdrive-500 are specified by LOGICDATA. The table manufacturer has to draw up the tube design in consultation with LOGICDATA during the design process and provide the appropriate installation materials. The responsibility of laying and fastening cables in a professional manner lies with the table manufacturer. Cables have to be laid and fastened along the table design, for example using cable channels. The actuator may only be operated if it is positioned vertically.

4.1 Mounting Concepts

The actuator supports two different mounting concepts:

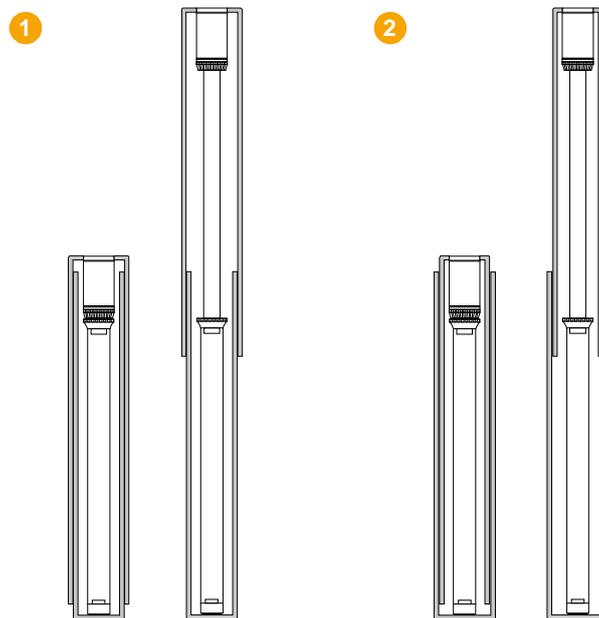
- **Outer tube on top**

In this variation, the larger outer tube of the telescopic tube is at the top, directly underneath the table surface, and the narrower inner tube on the ground.

- **Outer tube on bottom**

In this variation, the larger outer tube of the telescopic tube is on the ground and the narrower inner tube at the top.

Figure 2: Mounting concept, retracted and extended



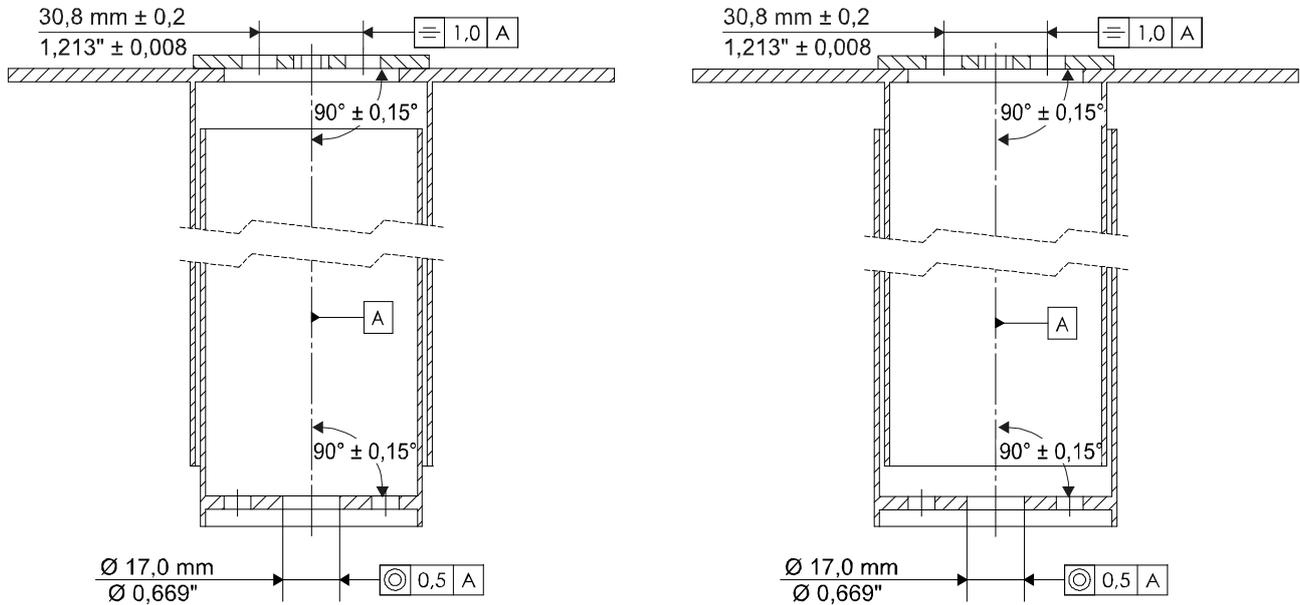
1 Mounting concept with inner tube on bottom, outer tube on top

2 Mounting concept with inner tube on top, outer tube on bottom

4.2 Mounting Tolerances

Non-compliance with mounting tolerances can lead to disruptions in the device's operation. Any warranty will be deemed as void if the mounting tolerances are not adhered to.

Figure 3: Mounting Tolerances



4.3 Spindle-sided mounting plate

The spindle-sided mounting plate is fixed to the bottom of the tube. There are four holes and one opening in the spindle-sided mounting plate as shown in the figure below:

Figure 4: Design example for the spindle-sided mounting plate

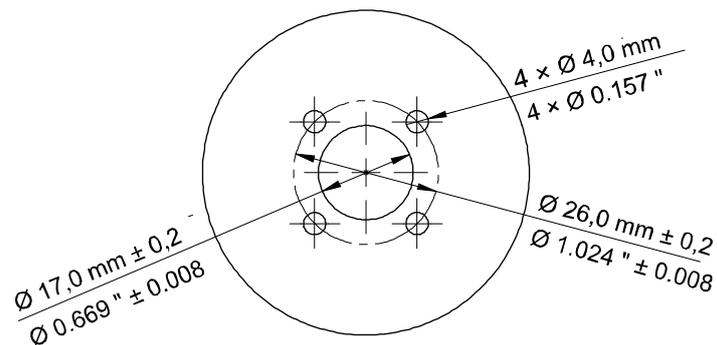
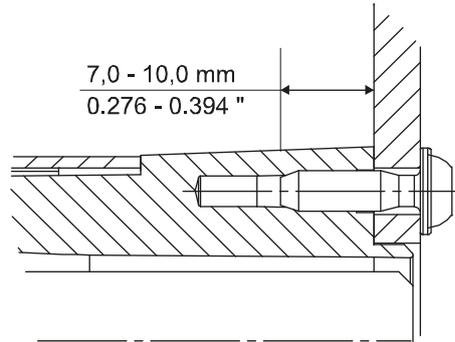


Figure 5: Detail view of the spindle-sided's point of attachment



4.4 Motor-sided mounting plate

The motor-sided mounting plate is fixed to the actuator with the two screws supplied by LOGICDATA. The mounting plate itself is provided by the table manufacturer. It must be $4.0 \text{ mm} \pm 0.1 \text{ mm}$ in size and have the following holes and opening.

Figure 6: Detail view for the motor-sided mounting plate

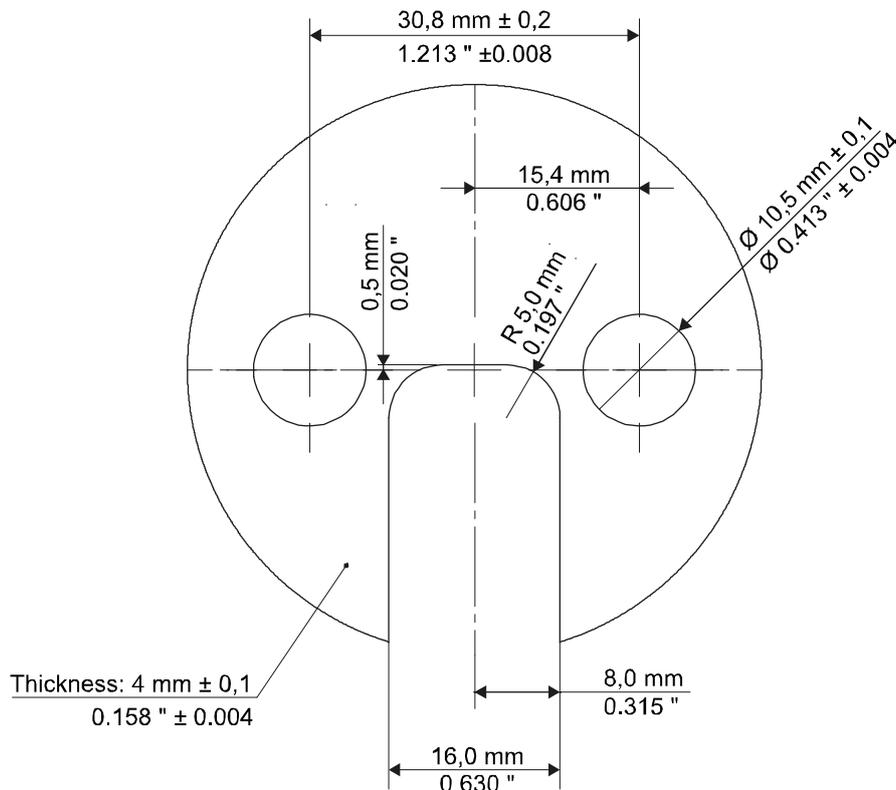
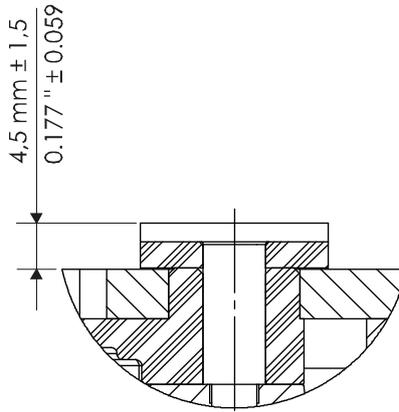


Figure 7: Detail view of a motor-sided's point of attachment



5 Unpacking

Actuators are delivered in batch to table manufacturers. The actuators can be packaged in cardboard or plastic.

NOTICE

Be careful of ESD when handling or unpacking the actuator. In the event that failures are caused by electrostatic discharge, claims under the guarantee will not be accepted.

NOTICE

The actuator may not be subjected to bumps, dropped, or hit. If an actuator is dropped or bumped by a heavy object, do not build it into the table, but send it back to LOGICDATA for repairs.

Unpack as follows:

1. Put on an antistatic wrist strap.
2. Remove the packaging.
3. Check the contents for completeness and proper condition.
4. Separate the plastic and cardboard packaging elements from each other. Dispose of the packaging material in a safe and environmentally friendly way.

6 Assembly

Parts List

- SLIMdrive-500
- Two Torx screws and two rubber washers

Additional Parts Required

- Table tubes and their spindle- and motor-sided mounting plates.
- Two fixing screws; LOGICDATA recommends using Ejot DELTA PT 35 x 12 screws

Tools Required

- Torx screwdriver, size T20
- Suitable screwdriver for the fixing screws

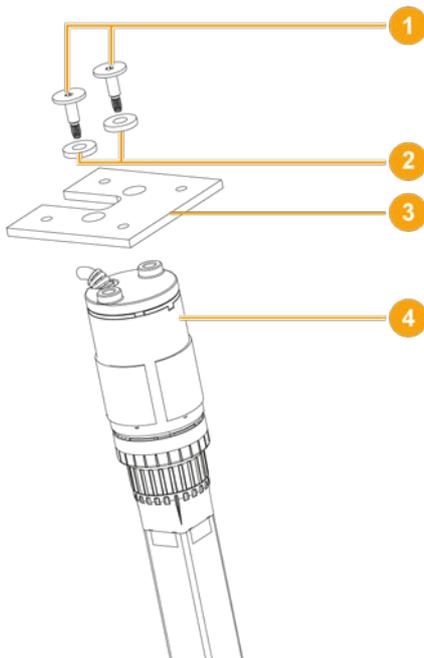
NOTICE

Take care that the cable does not get damaged during assembly.

Assembly Instructions

1. Place the motor-sided mounting plate in such a way that the cable runs out of the cable opening on the mounting plate.
2. Screw the mounting plate to the actuator using the fixing screws provided (Torx screws and preassembled damping washers). Never use the screws without damping washers. Tighten the screw with a tightening torque of 3.0 Nm.

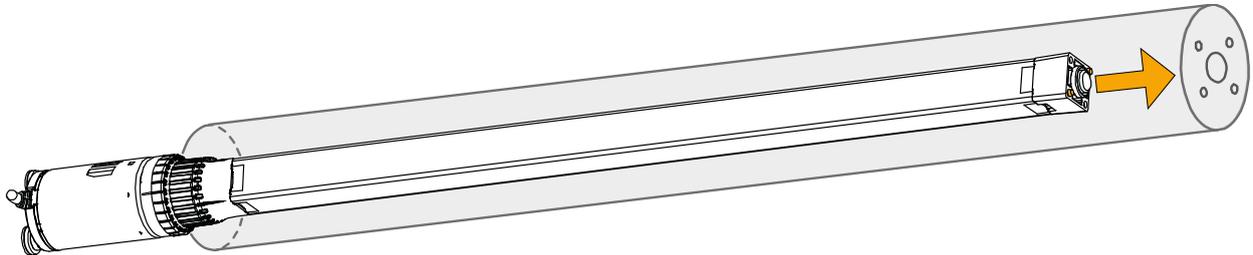
Figure 8: Motor-sided's point of attachment



- (1) Assembly screws
- (2) Rubber washers
- (3) Motor-sided mounting plate (provided by the table manufacturer according to specifications)
- (4) Actuator

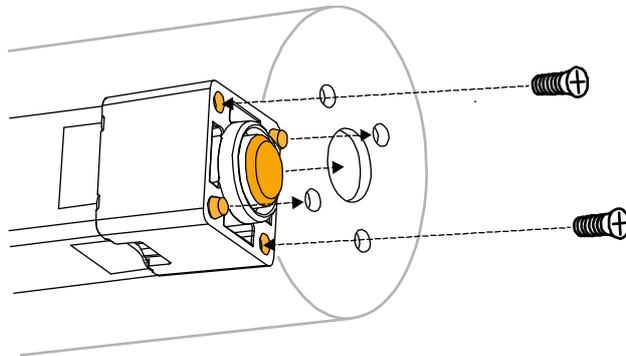
3. Slide the actuator into the tube so that its cable runs back down through the open end.

Figure 9: Slide actuator into the tube



4. Move the spindle further into the central opening on the mounting plate and turn it back and forth until both of the positioning protrusions slip into place on the mounting plate.

Figure 10: Fixing the actuator on the spindle-sided mounting plate



5. Screw the actuator to the tube using the fixing screws.

Tightening torque for a 7 mm screw length: 1.3 Nm

Tightening torque for a 10 mm screw length: 2.4 Nm

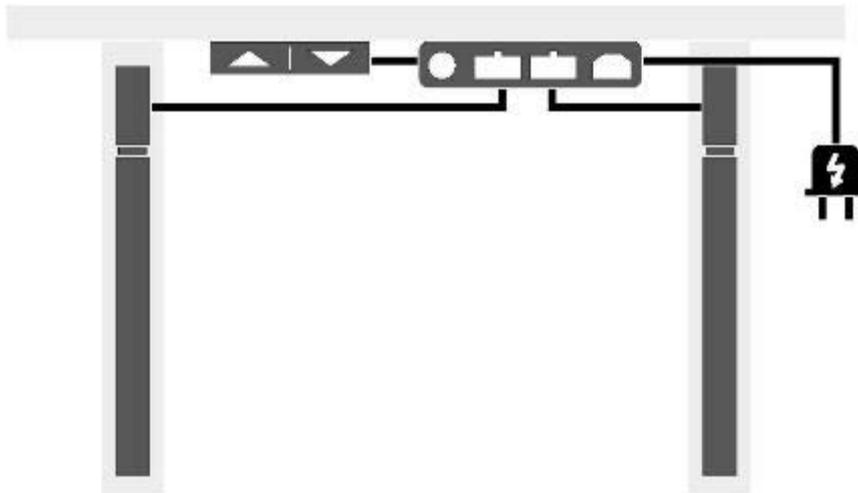
Speed: 500 rpm

When using screws other than the recommended, get in touch with the screw manufacturer regarding the torque and speed.

7 Putting into Operation

The SLIMdrive-500 actuator is part of a LOGICDATA system to operate a height-adjustable table. Operation of the system is achieved by a separate LOGICDATA handset and is independent from the system configuration. Please refer to the documentation of your LOGICDATA system to find out how to put it into operation.

Figure 11: Example of a LOGICDATA system



8 Replacing an actuator

To replace an actuator, proceed as follows:

1. Move the table surface to its lowest position.
2. Disconnect the system from the mains voltage.
3. Turn the table over so that the table top is on the ground.
4. Disconnect the actuator's connection to the control box.
5. Remove the tubes from the table top. Depending on the table manufacturer, tubes can be screwed into position or are welded on.
6. Remove both of the Torx screws on the motor-sided mounting plate (side with the cable).
7. Remove both of the screws at the bottom end of the tube.
8. Pull the actuator out of the tube.
9. Attach the new actuator as described in the Chapter "Assembly".

9 Maintenance

The device does not require any maintenance. If the actuator displays any deviation from its standard operation or you encounter technical difficulties, please contact our support service. Repairs may only be carried out by LOGICDATA.

10 Responsible Final Disposal



When the actuator's period of use is brought to an end, all parts should be sorted and disposed of in an environmentally friendly manner.

The actuator is classified as a piece of electrical and electronic equipment, and therefore must be correctly disposed of separately from domestic waste in accordance with the WEEE directive 2012/19/EU. The actuator is labelled with the symbol illustrated on the left.

Check the recyclability of materials and components before disposing of them. Recycle as many parts as possible.

Dispose of all materials and parts in accordance with local guidelines and legislation. Ensure that the disposal is sustainable for people and the environment alike

11 Manufacturer

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