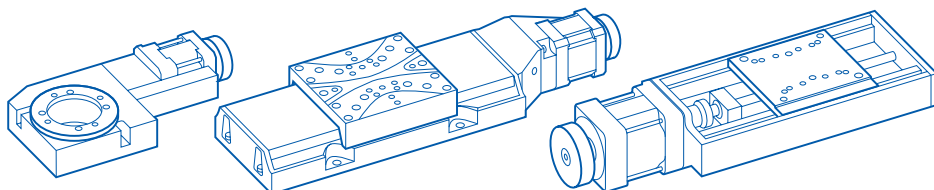


Positioners with Electric Motors

Short Instructions



DT-xx / HPS-170 / L-xxx / LS-xxx / PRS-xxx / RS-40 / UPL-120 / V-611 / VT-80 / WT-xx /
WT-xxx



User information

These short instructions contain an overview of the most important safety and handling instructions for positioners with electric motor with the product codes given above (x: any number).

Subject to change. These short instructions are superseded by any new release. The latest respective release is available for download on our website.



Downloading and reading the manual

The actions during installation, startup, operation, and maintenance require additional information from the manuals of your product. Manuals can be titled as follows: "User Manual", "Technical Note".

Downloading the manuals from the website

1. Open the website www.pi.ws.
2. Search the website for the product number (e.g., RS-40).
3. Select the corresponding product to open the product page.
4. Select the **Downloads** tab.
→ The manuals are shown under **Documentation**.
5. Select **ADD TO LIST** for the desired manual and then select **REQUEST**.
6. Fill out the request form and select **SEND REQUEST**. The download link will then be sent to the entered e-mail address.

If you cannot find the manual you are looking for or if you have any questions: Contact our customer service via service@pi.de.



Safety

Intended use

This product is a laboratory device as defined by DIN EN 61010-1. The product is intended for indoor use and use in an environment that is free of dirt, oil, and lubricants.

In accordance with its design, the product is intended for positioning loads at various velocities. The positioner is not intended for applications in areas where failure would be a considerable risk for people or the environment.

It is only possible to use the product as intended when completely installed and connected, and in conjunction with suitable electronics.

The product may only be installed, operated, maintained, and cleaned by authorized and appropriately qualified personnel.

Installation instructions

WARNING! If the drive screw of the positioner is not covered, there is a risk of serious injuries from hair, jewelry, or clothing becoming trapped.

- Shield areas with rotating components.
- Do not work on an unprotected positioner with loose hair, hanging jewelry, or loose-fitting clothing.

CAUTION! There is a risk of minor injuries from crushing between the moving parts of the positioner or the load and a fixed part or obstacle.

- Use protective structures to keep limbs away from areas in which they could be seized by moving parts.
- Maintain safety distances in accordance with DIN EN ISO 13857.

NOTICE! Electrostatic discharge can damage the positioner.

- If the positioner is supplied with an ESD protective cap: Remove the ESD protective cap from the connector first, when connecting the positioner to the controller.

NOTICE! Mechanical forces can damage or misalign the positioner.

- Observe the maximum permissible forces (see manual).
- Include the masses of the moved positioners in multi-axis systems in the calculations.
- **Linear stage:** When the motion axis is aligned vertically, the load must be lower than the holding force of the drive (see manual).
- **Rotation stage:** When the positioner is mounted vertically, the load must be lower than the maximum torque of the drive (see manual).

NOTICE! Manually moving the platform can cause increased wear on positioners with a gearhead.

- Only move the platform of positioners with a gearhead manually if there is no other possibility for motion.

NOTICE! Collisions can damage the positioner, the load to be moved, and the surroundings.

- Mount the positioner and the load so that the load cannot get jammed or blocked, or collide with objects in the workspace.

NOTICE! Unsuitable mounting could warp the positioner and reduce the accuracy.

- Mount the positioner on an even surface with similar thermal expansion properties (for recommended flatness, see manual).

NOTICE! A cable break leads to failure of the positioner.

- Install the positioner so that the cable is not bent too strongly or crushed during operation.

NOTICE! Heat produced during operation can affect your application.

- Install the positioner so that your application is not affected by the dissipating heat.

NOTICE! Incorrectly fitted screws and locating pins can cause damage.

- Select the screw length according to the depth of the mounting holes.
- Do not allow screw heads to protrude.

Startup instructions

NOTICE! Excessively high or wrongly connected operating voltages can cause damage to the positioner.

- Use compatible controllers only.
- Pay attention to the operating voltage range of the positioner (see manual).
- Pay attention to the correct pin assignment (see manual).

NOTICE! The positioner may move unintentionally when connecting it to the controller.

- Before connecting the positioner, check whether a startup macro is defined in the controller and if necessary, cancel the selection.

NOTICE! Uncontrolled oscillation can damage your application or the positioner.

- If oscillations occur, immediately switch off the servo mode or stop the positioner.
- Check the settings of the servo-control parameters (see manual).

NOTICE! High acceleration can cause considerable wear and damage the mechanics.

- Stop motion immediately if an electronics malfunction occurs.
- Move to the end of the travel range with low velocity.



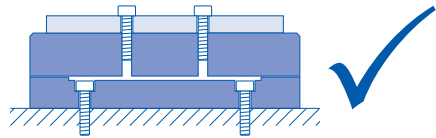
Installing

Mounting the positioner and affixing the load

1. Mount the positioner to the provided mounting holes.
2. Affix the load to the provided mounting holes.

3. Check that the positioner and the load are affixed firmly.

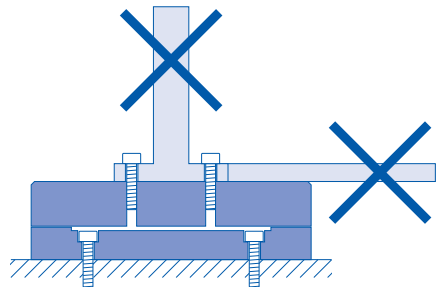
Correct mounting



Mounting on uneven surface



Incorrect alignment of the load



Old equipment disposal

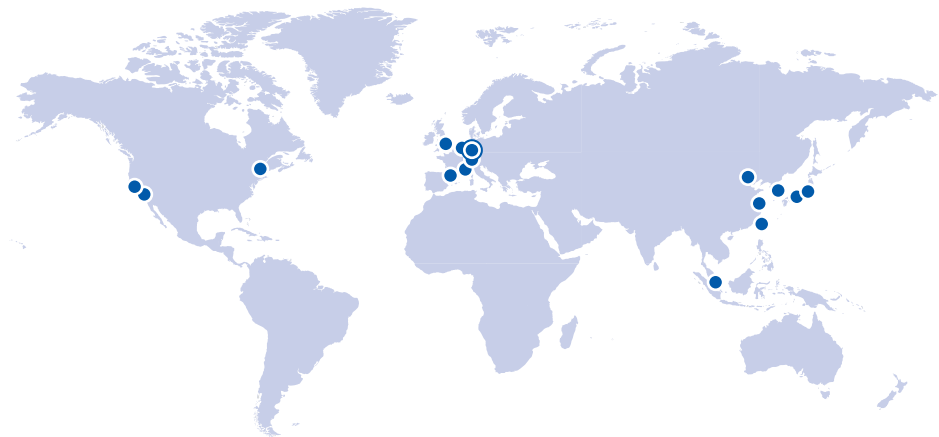
In accordance with EU law, electrical and electronic equipment may not be disposed of in EU member states via the municipal residual waste. This refers to devices which are labeled with the symbol for the separate collection of waste electrical and electronic equipment.

If you are established in a member state of the European Union and have an old device from PI miCos, PI miCos GmbH will take care of the environmentally friendly disposal of this old device free of charge. You can send the old PI miCos device free of charge to the following address:

PI miCos GmbH
 Freiburger Straße 30
 79427 Eschbach
 Germany

If you are not established in a member state of the European Union: Dispose of your old device

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