

General Mounting Instructions for Actuators and Stages

During the set-up of a system the actuator must be treated with care. Whenever additional masses are attached to a stage, or a load has to be screwed or unscrewed, harmful forces can easily be transferred to the hinges. This in turn can damage the actuator. The following instructions should be followed:

- When mounting loads to the stage the maximum load capacity is not to be exceeded. The respective values for each stage can be found in the corresponding data sheet.
- Connecting surfaces should be clean. Uneven or impure surfaces can lead to tensions and subsequently to less precise motion (fig. 2).
- Loads need to be placed onto the stage with their center of mass close to the stage (fig. 3).
- Use screws with the proper length. If the screws are too long they can block the movement or even damage the stage (fig. 3). Screw hole depths can be found in the stage drawings.
- Prevent the transfer of momentum onto the hinges. The load to be mounted, or the moving part of the actuator has to be fixed during screwing and unscrewing (fig. 4).

**correct mounting
of PX 200**

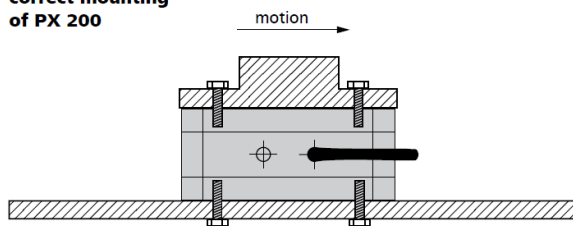


fig. 1: correct mounting of an additional mass onto PX 200 actuator

**incorrect mounting
of PX 200**

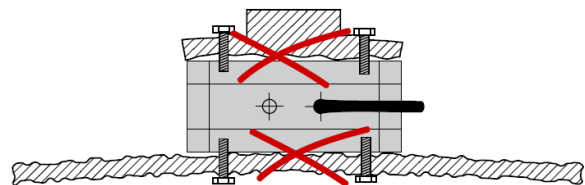


fig. 2: insufficient surface flatness of mounting surfaces

**incorrect mounting
of PX 200**

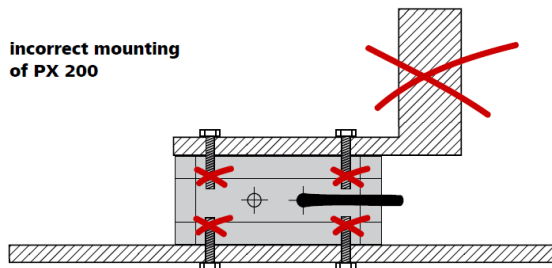


fig. 3: incorrectly mounted load and screws blocking the motion

**correct mounting
of PX 200**

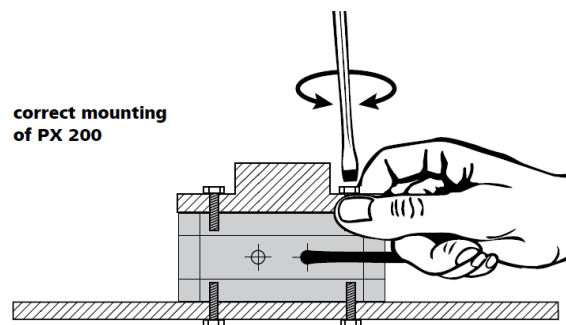


fig. 4: fix movable parts while screwing and unscrewing