



## Notes for mounting and use of piezo electrically driven positioning stages

Piezo electrically driven positioning stages are built for high precision positioning. Please handle careful. Especially for mounting other parts on the top plate. Please avoid torque forces when fastening screws in order to avoid damage to the actuator. Please avoid tensile forces greater than the given pre-load!

Please note, for standard actuators and actuators equipped with strain gauge sensors, the tolerance of the open loop motion is -10% to +40%. The tolerance of the capacitance is +/- 20%. The closed loop travel is 80% of the open loop travel. The resolution is only limited by the noise of the amplifier, and all given resolution values are based on measurements with the E-103-18 amplifier.

Standard calibration will be done without any load on the actuator. On customer request, defined loads (up to the max. load) can be calibrated during manufacturing once to optimize a system. Additional calibration has to be paid by the customer. The standard cable length is 1m. The vacuum and cryogenic version cable length of the actuator is 0.6m. The extension cable length outside the vacuum chamber is 1.2m.

The total cable length of actuators equipped with strain gauge feed back sensors is 1m.

Actuators equipped with strain gauge feed back sensors and external pre-amplifier – please see added “E” on the part number - have a total cable length of 2m. A signal pre-amplifier box is in line with the cable 0.3m behind the actuator. The size of the cable box is BxHxL=12x16x45mm.

Actuators equipped with capacitive feed back sensors have a total cable length of 2m. A signal pre-amplifier box is in line with the cable 0.3m behind the actuator. The size of the cable box is (BxHxL=55x12x105mm).

## For further question please ask us!

**piezosystem jena GmbH**  
**Pruessingstr. 27**  
**D-07745 Jena**  
**Germany**  
**Tel.: +49-(0)3641-6688-0**  
**Fax: +49-(0)3641-6688-66**  
**[info@piezोजना.com](mailto:info@piezोजना.com)**

**piezosystem jena Inc.**  
**54 Hopedale St.**  
**MA 01747**  
**USA**  
**Tel.: 508-634-6688**  
**Fax: 508-634-6868**  
**[usa@piezोजना.com](mailto:usa@piezोजना.com)**

**piezosystem jena GmbH**

Pruessingstr. 27 • 07745 Jena • HRB Gera 2823 • VAT ID-Nr. DE 150531409

© **piezोजना** Commerzbank BLZ 820 400 00, KTO 258 420 9 • Deutsche Bank BLZ 820 700 24, KTO 531 571 8

Tel. + 49 (3641) 66 88-0 • Fax +49 (3641) 66 88 66 • E-Mail [info@piezोजना.com](mailto:info@piezोजना.com) • <http://www.piezोजना.com/>