



The CONEX-AG-LS25-27P is a piezo motor linear stage integrated with a closed-loop piezo motor controller/driver. For out-of-the box control, the CONEX-AGP controller is preconfigured and delivered with an Agilis AG-LS25-27P linear stage with a built-in direct read linear encoder.

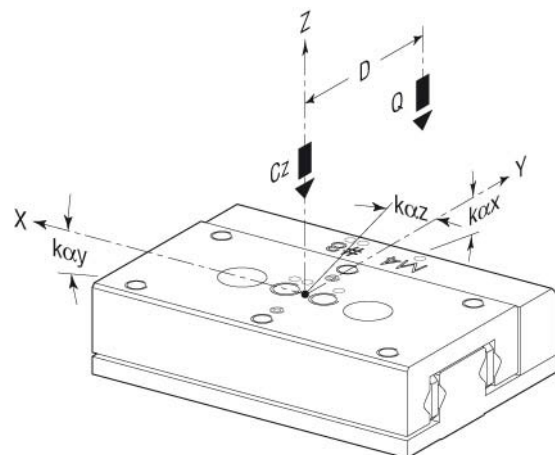
The CONEX-AGP is a very compact and inexpensive single axis motion controller with the same driver as the proven Agilis AG-UC2 2-axis, driver. The controller comes with the familiar CONEX GUI, simple and intuitive to use and conveniently accessible via USB, which also supplies power to the controller.

The CONEX-AGP closed-loop algorithm is a simplified version of the typical DC servo loop algorithm, and combined with the linear encoder, provides a system bi-directional repeatability of $0.3 \mu\text{m}$. There is an available deadband feature that allows the user to modify the closed-loop parameters to program the acceptable deviation from a position, and hold that position steady.

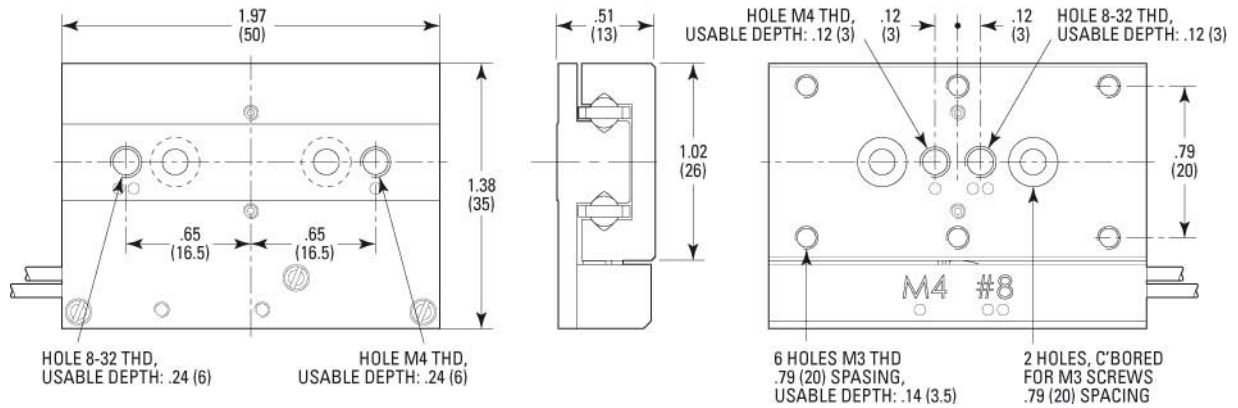
The linear stage of the CONEX-AG-LS25-27P is based on the Agilis AG-LS25-27 linear stage, but features an innovative miniature direct read linear encoder. The footprint is maintained while delivering sub-micron bi-directional repeatability expected from direct read encoder technology. Like the controller, the linear stage is very compact, but is capable of 27 mm travel, and $0.2 \mu\text{m}$ MIM.

Stage Specifications

| | |
|-----------------------------------|------------------------|
| Travel | 27 mm |
| MIM | $0.2 \mu\text{m}$ |
| Uni-directional repeatability | $0.2 \mu\text{m}$ |
| Bi-directional repeatability | $0.3 \mu\text{m}$ |
| On-axis accuracy | $20 \mu\text{m}$ |
| Origin repeatability | $0.2 \mu\text{m}$ |
| Maximum speed | 0.4 mm/s |
| Pitch/Yaw | $200 \mu\text{rad}$ |
| Cz, Normal load capacity | 2.5 N |
| Axial load capacity | 1.5 N |
| $K\alpha_x$, Compliance in roll | $550 \mu\text{rad/Nm}$ |
| $k\alpha_y$, Compliance in pitch | $350 \mu\text{rad/Nm}$ |
| $k\alpha_z$, Compliance in yaw | $300 \mu\text{rad/Nm}$ |
| Q, Off-center load | $Q \leq Cz/(1 + D/9)$ |
| D, Cantilever distance | |



Dimensions



EU Declaration of Conformity

Please refer to the “CONEX-AGP - Part 1 - Introduction, Safety & Service” manual supplied on the CD-ROM to have a complete description of the EU Declaration of Conformity.



NOTE

**This product complies with the RoHS directive
(Restriction of Hazardous Substances).**