

CONEX-AG-LS25-27P CONEX-AGP Controller with AG-LS25-27P Linear Stage



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.

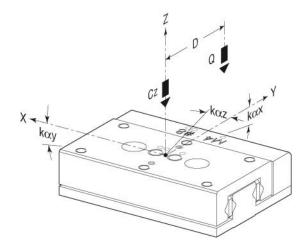
The CONEX-AGP is a very compact and inexpensive single axis motion controller with the same driver as the proven Agilis AG-UC2 2-axis, driver. The controller comes with the familiar CONEX GUI, simple and intuitive to use and conveniently accessible via USB, which also supplies power to the controller.

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 $0.3 \,\mu$ 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 $0.2 \,\mu$ m MIM.

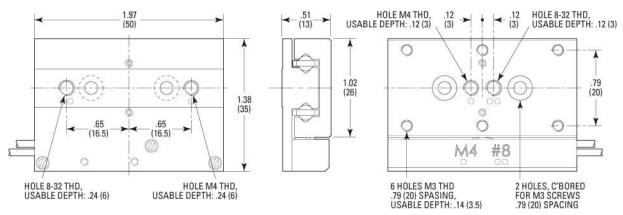
Stage Specifications			
Travel	27 mm		
MIM	$0.2 \ \mu \mathrm{m}$		
Uni-directional repeatability	$0.2 \ \mu m$		
Bi-directional repeatability	0.3 µm		
On-axis accuracy	20 µ m		
Origin repeatability	0.2 μm		
Maximum speed	0.4 mm/s		
Pitch/Yaw	200 μ rad		
Cz, Normal load capacity	2.5 N		
Axial load capacity	1.5 N		
Kax, Compliance in roll	550 µrad/Nm		
kαy, Compliance in pitch	350 µrad/Nm		
kαz, Compliance in yaw	300 μ rad/Nm		
Q, Off-center load	$Q \le Cz/(1 + D/9)$		
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).

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