

CONEX-AG-PR100P



PIEZO MOTOR ROTATION STAGE WITH INTEGRATED CLOSED-LOOP CONTROLLER
CONNECT EASILY - CONTROL SIMPLY



For Motion, Think Newport™

- Highly repeatable angular motion
- High sensitivity (MIM)
- Compact size
- Affordable and quick delivery
- Integrated and easy to setup

The CONEX-AG-PR100P is a piezo motor rotary stage integrated with a closed-loop piezo motor controller/driver. Originally targeted for repeatable positioning of polarizing optics, it can also be used as a miniature rotation stage for precision positioning of other optics or lightweight samples.

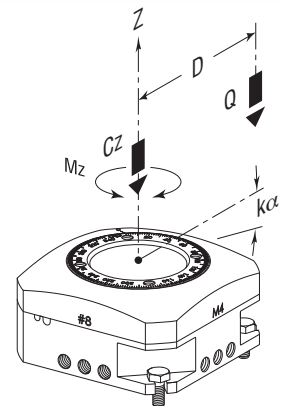
For out-of-the box control, the CONEX-AGP controller is preconfigured and delivered with an Agilis AG-PR100P rotary stage with a built-in direct read encoder. The CONEX-AGP is a very compact and inexpensive single axis motion controller with the same driver as the proven Agilis piezo motor driver. The 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 rotary encoder, provides a system uni-directional repeatability of 0.002°. For stability in-position, the user can adjust the deadband parameter that stops dithering when the stage is within a set position tolerance.

The CONEX-AG-PR100P is based on the Agilis AG-PR100 rotary stage, but features an innovative miniature direct read encoder. The footprint is maintained while delivering 0.003° bi-directional repeatability, a benefit from direct read encoder technology. The rotary stage is very compact, but is capable of 340° travel, and 0.001° MIM. For safety, hard stops are included.

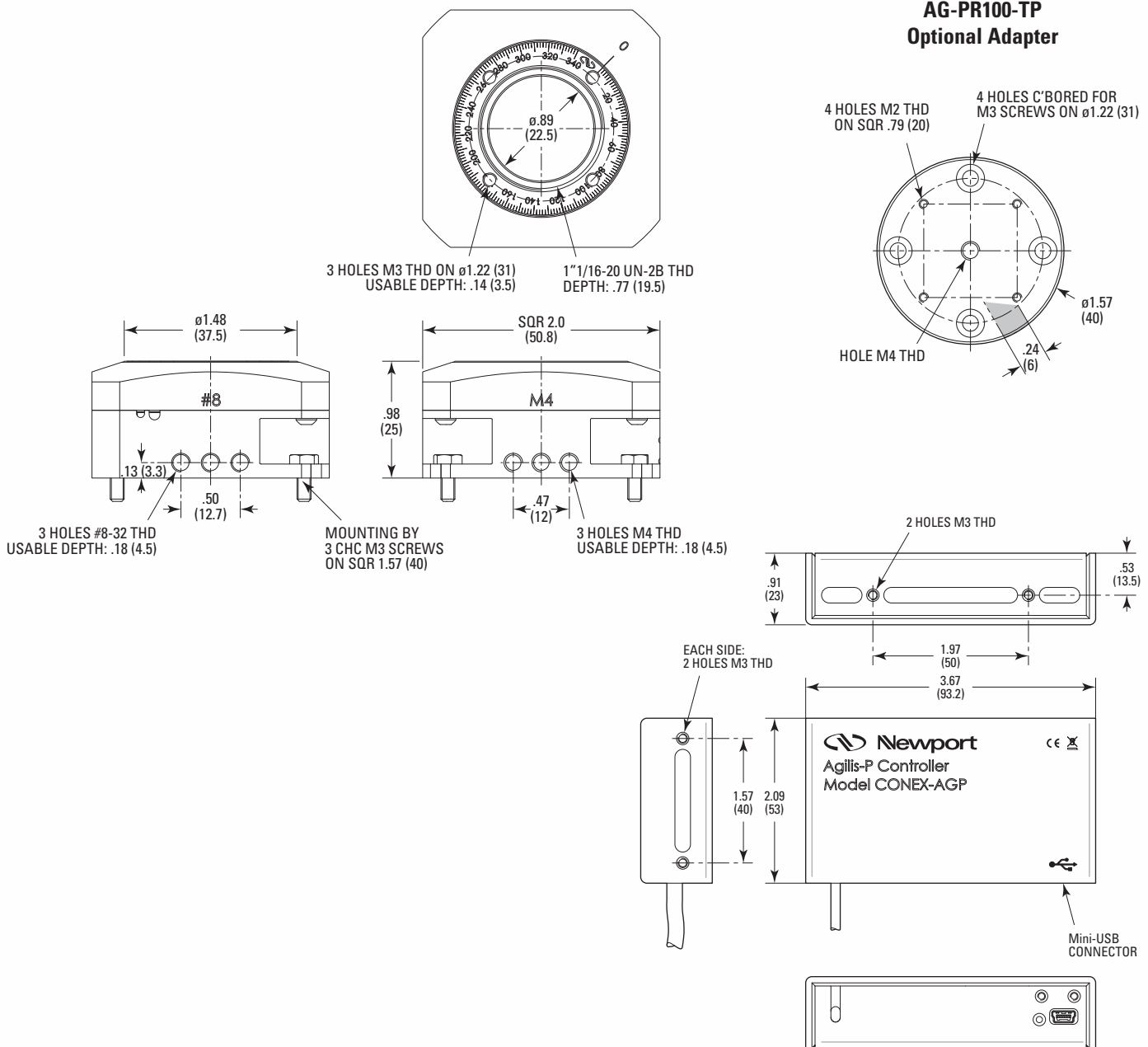
Specifications

Travel	340°
Minimum Incremental Motion, MIM	0.001°
Uni-directional repeatability	0.002°
Bi-directional repeatability	0.003°
On-axis accuracy	0.08°
Origin repeatability	0.002°
Maximum speed	1.5 °/s
Wobble	100 µrad
Cz, Normal load capacity	2 N
Kα, Transversal compliance	200 µrad/Nm
Mz, Nominal torque	0.02 Nm
Q, Off-center load	$Q \leq Cz/(1 + D/16)$
D, Cantilever distance (mm)	



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Dimensions



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