



## LS-100 Motorized Rotary Stage

The LS-100 motorized rotary stage has a large clear aperture and compact profile. A stepper motor with a geared drive belt generates fast, repeatable motion. A micro-stepping driver and gear reduction enables precise rotary positioning. The stage is available with a 400 step (0.9° per step) pancake motor (pictured) or a higher-torque/speed-upgraded 200 step motor (not shown). The stage can be run open loop or an encoder (pictured) can be added for closed loop positioning. A rugged bearing with 4-point contact supports both radial and thrust loads so the stage can be operated horizontally or vertically. This inexpensive stage is ideal for positioning and rotating 4" optics. Applications include positioning continuously variable ND filters and rotating Lexitek's Turbulence Phase Plates.

### **SPECIFICATIONS**

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- 6"x9"x1.5" footprint, with motor driver 1.8" thick, with encoder 2.0" thick (speed upgrade adds 1")
- Optic holder with 4" bore, 3.75" clear aperture
- Precision, slim ball bearing with X-contact races
- Compact stepper motor 1.5 arc-min step error, 0.25 A/phase, 4 oz-in torque
- Speed upgrade motor 1 A/phase, 30 oz-in torque
- Flexible gear belt drive with no backlash or lubrication, 6:1 gear ratio
- 1-8X microstepping drive for smooth motion, 12-24V
- Variable speed and direction using logic (TTL) inputs for step and direction
- Rotation rates to 10/40 rpm guaranteed/typical, 100/250 rpm with speed upgrade motor
- Optical home sensor
- Optional encoder with 32-1250 cycles per revolution (2500 cycle encoder with speed upgrade)

Related products: Stepper Motor Controller, Turbulence Phase Plates

Please consult us if your requirements call for different specifications or if you need custom engineering of this product or related products.

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