

RCS-090-ER8 Datasheet

Direct-Drive Rotary Stage with Pneumatic ER8 Collet Actuation

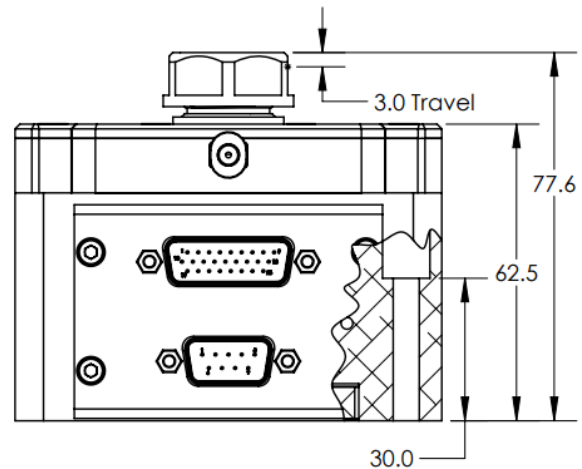
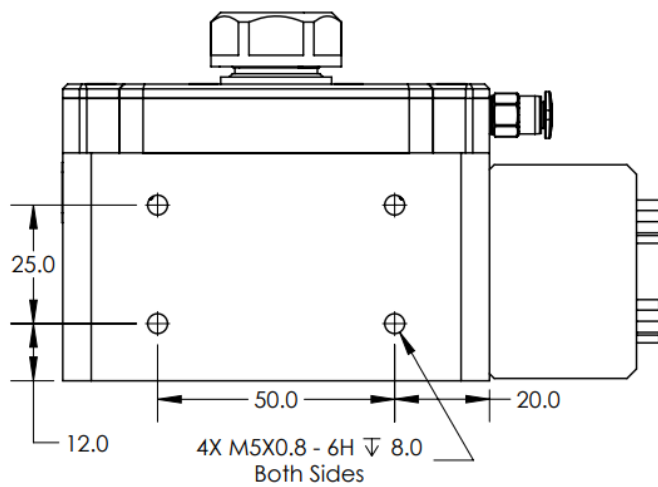
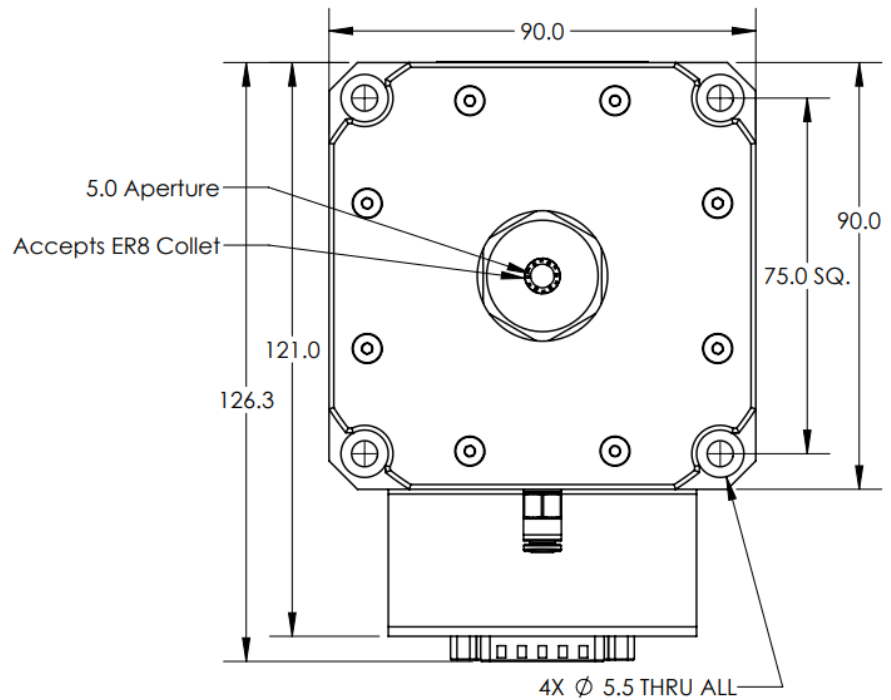
FEATURES

- Continuous 360° rotation
- High resolution encoder
- Brushless DC motor
- Ø 5.00mm through bore
- Spring-close, air-open collet
- Accepts ER8 type collets



The RCS-090 is a compact, high-precision rotary stage engineered for laser tube processing applications where space is at a premium. It features an integrated ER8 collet system with automatic gripping and adjustable clamping force to accommodate small-diameter parts across a range of materials and wall thicknesses. Its direct-drive rotary architecture delivers smooth, accurate, near zero-backlash motion for demanding cutting and welding operations. Contact us to learn how the RCS-090 can integrate into your laser processing system.

RCS-090-ER8 Dimensions



RCS-090-ER8 Options and Specs

RCS-090 Ordering Options	
Product Series	RCS: Rotary Stage with Integrated Collet Actuation
Stage Profile Size	090: 90mm Square Profile
Motor Code	AC: Brushless DC, Direct Drive
Encoder Disk	M: Glass Disk, 18,000 Lines per Revolution, Incremental
Encoder Feedback	C: RS422, 25X Interpolation (1,000,000 counts/rev) D: RS422, 100X Interpolation (4,000,000 counts/rev) E: 1Vpp Sin-Cos (10,000 sine periods/rev) ¹
Collet Compatibility	ER8 (up to 5mm OD Gripping)
Additional Options	0: No Additional Options
Customizations	00: Standard Product 01-99: Custom Stage, Customer Specific ¹
Example Part Number	RCS-090-AC-M-D-ER8-0-04
Notes	1: Common customizations include: Stainless Hardware and cleanroom preparation

RCS-090-ER8 Specifications	
Accuracy ($\pm$ arc-sec) ¹	30
Bi-Directional Repeatability (arc-sec) ¹	4.0
Axial Runout (μ m) ²	30
Radial Runout (μ m) ²	30
Continuous Torque (Nm)	0.54
Peak Torque (Nm)	1.08
Rotational Inertia (kg·m ²)	0.00034
Stage Mass (kg)	1.5
Air Pressure (PSI)	60-90
Required Air Quality	Dry Air, 1 μ m Maximum Particulate Size

Notes:
1: Specification is verified via laser interferometer on every stage
2: Specification may be verified upon request, additional charges may apply

RCS-090-ER8 Maximum Velocity	
Encoder Output Code	Max Velocity ($^{\circ}$ /s) ¹
C	3120
D	720
E	3600

Notes:
1: The true maximum velocity of a rotary stage is dependent on the controls system as well as the stage

