

## RCS-150-ER25 Datasheet

### Direct-Drive Rotary Stage with Pneumatic ER25 Collet Actuation

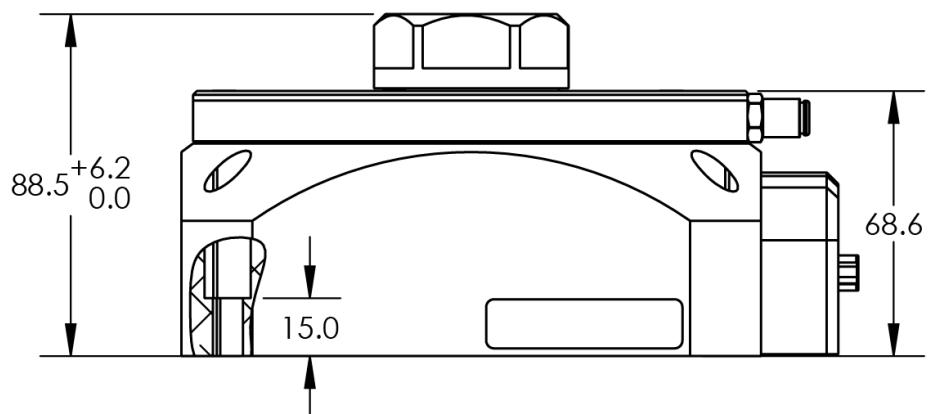
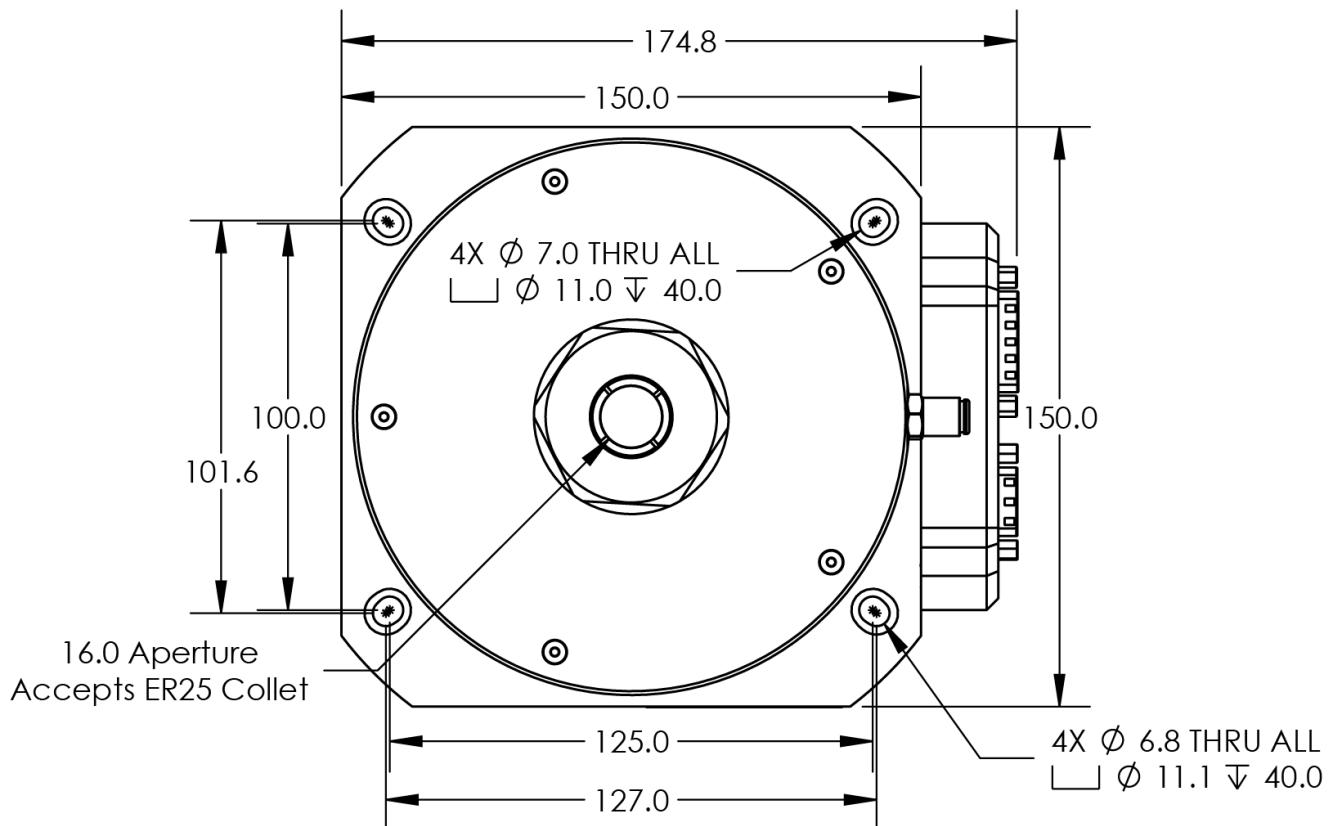
#### FEATURES

- Continuous 360° rotation
- High resolution encoder
- Brushless DC motor
- Ø 16.00mm through bore
- Spring-close, air-open collet
- Accepts ER25 type collets



The RCS-150 is a high-precision rotary stage designed for demanding laser tube processing applications. It features an integrated ER25 collet system that provides automatic gripping with adjustable clamping force to accommodate a wide range of materials and wall thicknesses. Its direct-drive rotary architecture delivers smooth motion, excellent accuracy, and zero-backlash performance. Contact us to learn how the RCS-150 can enhance your laser cutting or welding system.

## RCS-150-ER25 Dimensions



## RCS-150-ER25 Options and Specs

RCS Ordering Options	
Product Series	RCS: Rotary Stage with Integrated Collet Actuation
Stage Profile Size	150: 150mm Square Profile
Motor Code	AD: Brushless DC, Direct Drive
Encoder Disk	BB: Glass Disk, 18,000 Lines per Revolution, Incremental
Encoder Feedback	C: RS422, 25X Interpolation (1,800,000 counts/rev) D: RS422, 100X Interpolation (7,200,000 counts/rev) E: 1Vpp Sin-Cos (18,000 sine periods/rev) <sup>1</sup>
Collet Compatibility	ER25 (up to 16mm OD Gripping)
Additional Options	0: No Additional Options
Customizations	00: Standard Product 01-99: Custom Stage, Customer Specific <sup>1</sup>
Example Part Number	RCS-150-AD-BB-C-ER25-0-02
Notes	1: Common customizations include: Stainless Hardware and cleanroom preparation

RCS-150-ER25 Specifications	
Accuracy ( $\pm$ arc-sec) <sup>1</sup>	30
Bi-Directional Repeatability (arc-sec) <sup>1</sup>	4.0
Axial Runout ( $\mu$ m) <sup>2</sup>	30
Radial Runout ( $\mu$ m) <sup>2</sup>	30
Continuous Torque (Nm)	1.56
Peak Torque (Nm)	3.12
Rotational Inertia (kg $\cdot$ m <sup>2</sup> )	0.0025
Stage Mass (kg)	3.6
Air Pressure (PSI)	60-90
Required Air Quality	Dry Air, 1 $\mu$ 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-150-ER25 Maximum Velocity	
Encoder Output Code	Max Velocity (°/s) <sup>1</sup>
C	1750
D	400
E	2650

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

