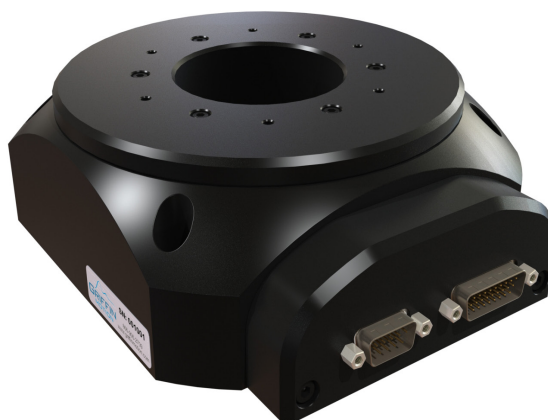


RTS-150 Datasheet

Low Profile, High-Precision Rotary Stage

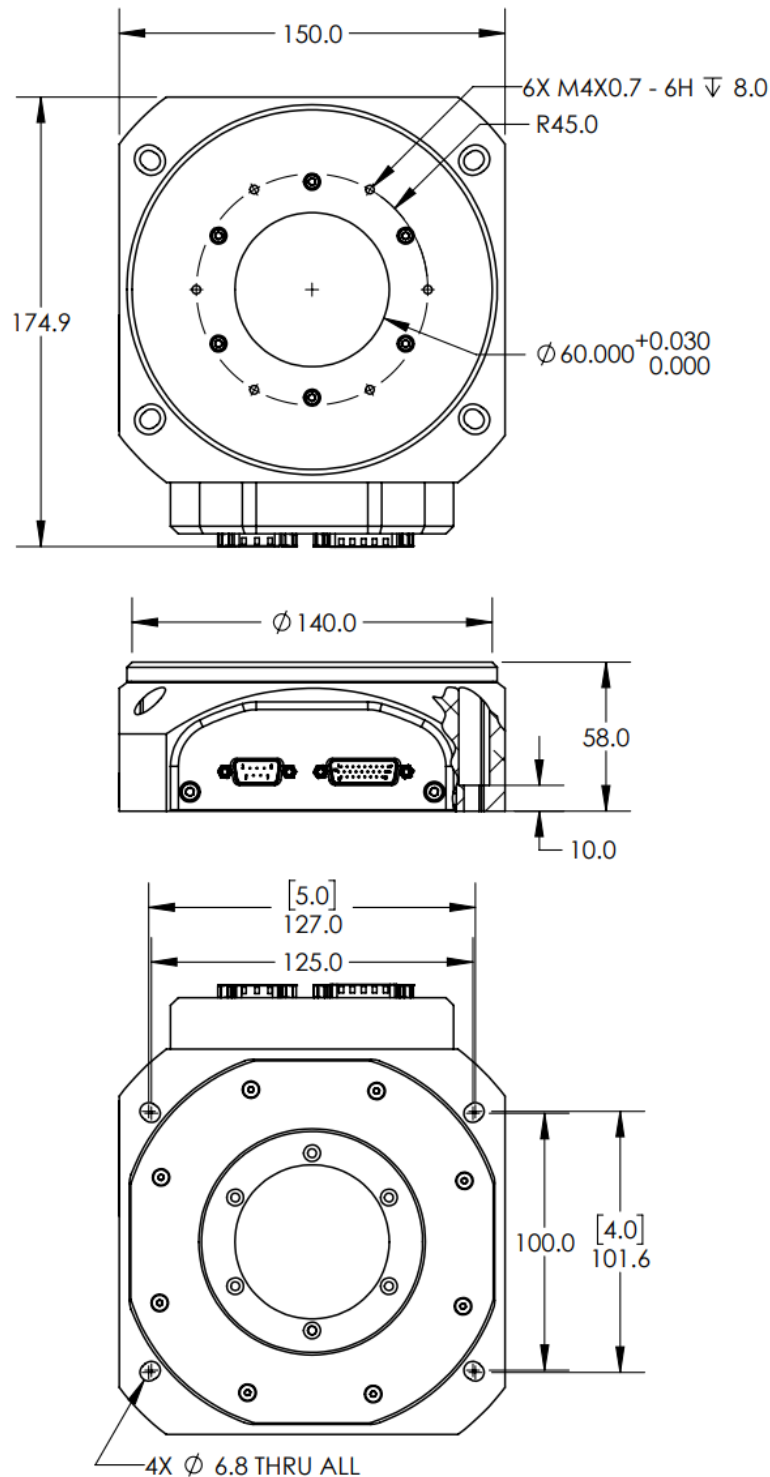
FEATURES

- Direct-Drive Brushless Motor
- Continuous 360° Travel
- Optical Home Index
- Variety of Encoder Feedback Options
- High-Rigidity Bearing
- Available Stainless Hub



The RTS-150 is a low-profile, high-precision rotary stage designed for applications requiring accurate and repeatable rotation or indexing. Driven by a direct-drive, brushless motor, the RTS-150 delivers smooth motion with minimal backlash and excellent dynamic response. Its rigid construction ensures stability and precision, even under load, while its low height allows for integration into tight spaces. Ideal for metrology, optical alignment, and general automation, the RTS-150 offers reliable, high-performance rotary positioning.

RTS-150 Dimensions





1040 CLASSIC ROAD | APEX, NC 27539
P: 866.906.2709
www.griffinmotion.com

RTS-150 Ordering Options

RTS-100 Ordering Options	
Product Series	RTS: Rotary Stage
Drive Technology	DD: Direct Drive
Stage Diameter	150: 144mm Diameter Hub
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)
Hub Material	A: Aluminum
Precision Grade	S: Standard Precision P: High Precision
Additional Options	0: No Additional Options
Customizations	00: Standard Product 01-99: Custom Stage, Customer Specific ¹
Example Part Number	RTS-DD-200-Y-D-A-P-0-07
Notes	1: Common customizations include: custom hole patterns and cleanroom preparation

RTS-150 Performance Specifications

RTS-150 Specifications, Standard Precision	
Accuracy (\pm arc-sec) ¹	30
Bi-Directional Repeatability (arc-sec) ¹	3.0
Axial Runout (μ m) ²	10.0
Radial Runout (μ m) ²	
Wobble (\pm arc-sec) ²	10.0
Continuous Torque (Nm)	1.56
Peak Torque (Nm)	3.12
X Load Capacity (Fx) (N)	180
Y Load Capacity (Fy) (N)	180
Z Load Capacity (Fz) (N)	350
Moment Load Capacity (Mx) (Nm)	15
Moment Load Capacity (My) (Nm)	15
Rotational Inertia (kg·mm ²)	0.0025
Stage Mass (kg)	2.7
Notes: 1: Specification is verified via laser interferometer on every stage 2: Specification may be verified upon request, additional charges may apply	

RTS-150 Specifications, High Precision	
Accuracy (\pm arc-sec) ¹	20
Bi-Directional Repeatability (arc-sec) ¹	2.0
Axial Runout (μ m) ²	6.0
Radial Runout (μ m) ²	
Wobble (\pm arc-sec) ²	6.0
Notes: 1: Specification is verified via laser interferometer on every stage 2: Specification may be verified upon request, additional charges may apply	

RTS-150 Maximum Velocity	
Encoder Feedback Code	Max Velocity (°/s) ^{1,2}
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 2: Ultra-High Precision Stages are limited to 800°/s	

