

RSW60A-E03T3A Datasheet



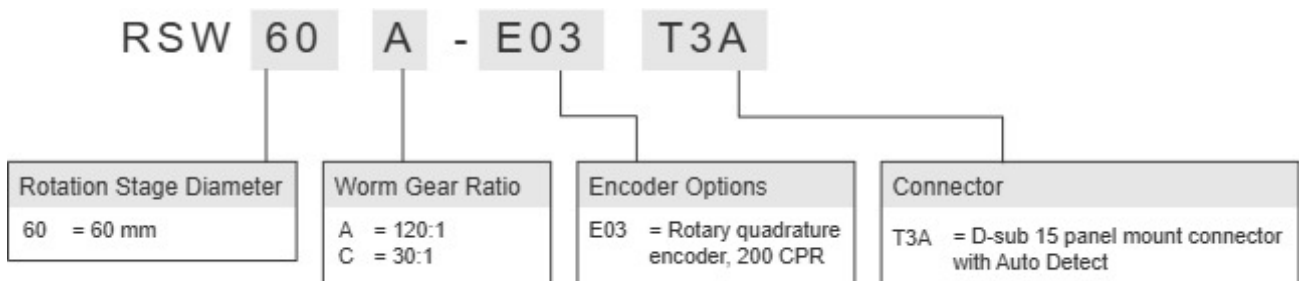
- Speed up to 75 rpm and torque up to 280 N-cm
- 23 mm aperture
- Worm gear driven for continuous rotation
- Two lens holders allow for use as a polarizer mount
- Encoder position feedback with slip/stall detection and automatic recovery
- Designed for use with MCC Family controllers or any 2-phase stepper motor controller
- With AutoDetect, Zaber controllers automatically configure settings for the connected peripheral
- Custom versions available

RSW-E Series Overview

Zaber's RSW-E precision motorized rotation stages, with integrated motor encoders, are stepper motor and worm gear driven and capable of continuous rotation. The stages are designed to connect directly to our MCC Family universal motor controllers, or they can be used with any 2-phase stepper motor controller through the panel mount DB15 connector. Set up is easy with AutoDetect. Once connected, the controller will automatically detect and configure the RSW-E.

For more information visit: <https://www.zaber.com/products/rotary-stages/RSW-E>

RSW-E Series Part Numbering & Options



RSW60A-E03T3A Drawings

- [RSW-E.png \(Dimension Drawing for the RSW-E\)](#)

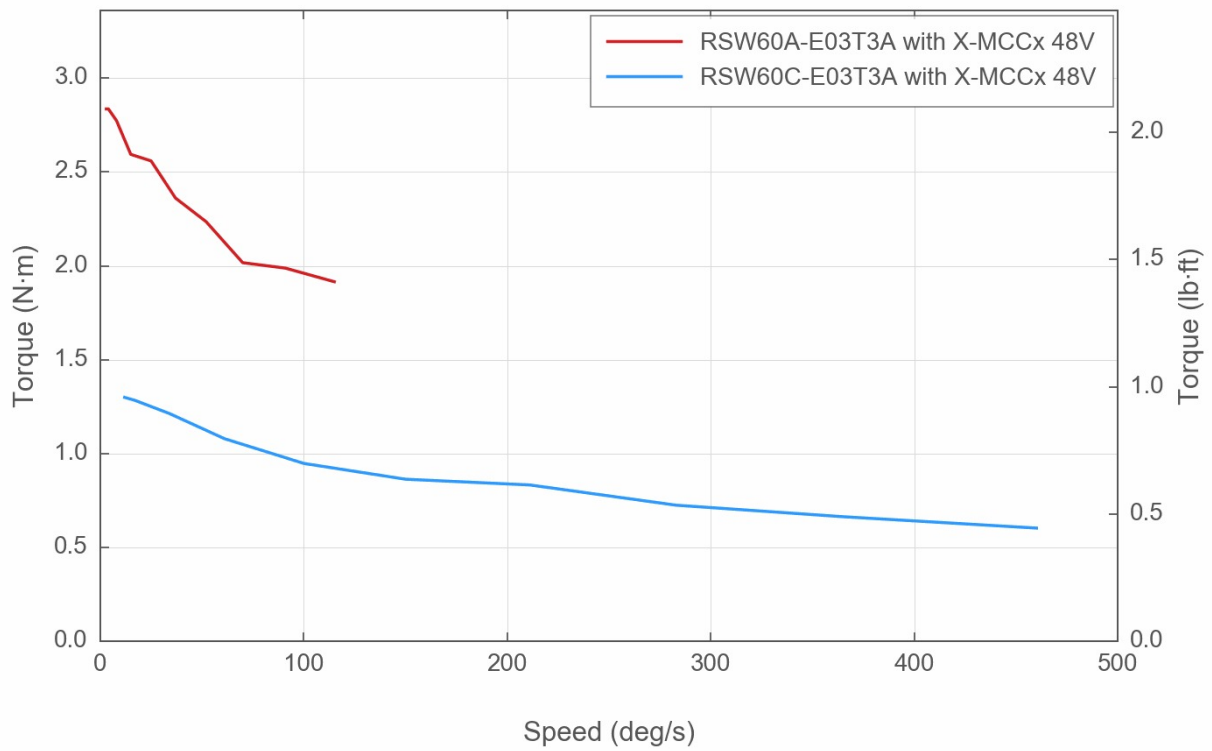
RSW60A-E03T3A Specifications

Microstep Size (Default Resolution)	0.000234375° (4.091 μrad)
Built-in Controller	No
Recommended Controller	MCC (48 V) Recommended
AutoDetect	Yes
Range	360°
Accuracy (unidirectional)	0.08° (1.396000 mrad)
Repeatability	< 0.02° (< 0.349 mrad)
Backlash	< 0.04° (< 0.698 mrad)
Maximum Speed	115°/s (19 rpm)
Minimum Speed	0.000143°/s (2.496 μrad/s)
Speed Resolution	0.000143°/s (2.496 μrad/s)
Encoder Resolution	200 CPR (800 states/rev)
Encoder Type	Rotary quadrature encoder
Maximum Continuous Torque	280 N-cm (396.5 oz-in)
Maximum Centered Load	200 N (44.9 lb)
Maximum Moment (Transverse)	410 N-cm (580.6 oz-in)
Stage Top Dimension	60 mm (2.362")
Radial Error Motion	+/- 4 μm (+/- 0.000157")
Axial Error Motion	< 4 μm (< 0.000157")
Tilt Error Motion	+/- 0.0033° (+/- 57.60 μrad)
Bearing Plane Offset	16.4 mm (0.646")
Angular Motion Per Motor Rev	3°
Motor Type	Stepper (2 phase)
Motor Rated Current	1500 mA/phase
Motor Winding Resistance	2.05 ohms/phase
Inductance	1 mH/phase
Motor Connection	D-sub 15
Default Resolution	1/64 of a step
Mechanical Drive System	Precision Worm Gear
Limit or Home Sensing	Magnetic home sensor
CE Compliant	Yes

Microstep Size (Default Resolution)	0.000234375° (4.091 μrad)
Vacuum Compatible	No
Weight	0.64 kg (1.411 lb)

RSW-E Series Charts

Torque Speed Performance



Contact

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