

## X-RSW60A-E03 Datasheet



- Speed up to 75 rpm and torque up to 2.25 N-m
- Two lens holders allow for use as a polarizer mount
- Worm gear driven for continuous rotation
- Built-in controller; daisy-chains with other Zaber products
- Encoder position feedback with slip/stall detection and automatic recovery
- Multiple X-Series products in a daisy-chain can share a single power supply
- Custom versions available

### X-RSW-E Series Overview

Zaber's X-RSW-E Series products are computer controlled motorized rotary stages with integrated controllers and motor encoders. They are stand-alone units requiring only a standard 24-48 V power supply.

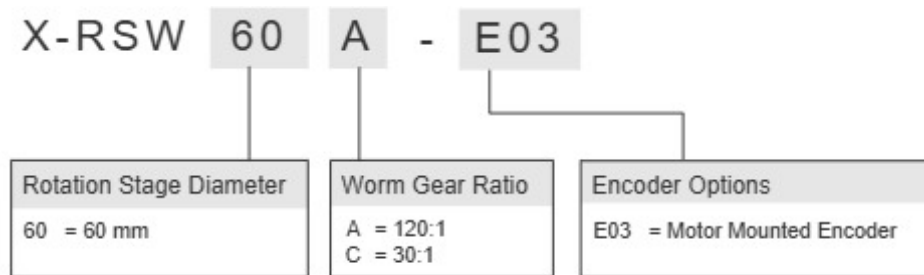
Built-in motor encoders allow for closed-loop operation and slip/stall recovery features. An indexed knob provides smooth manual control at variable speeds in both directions for versatile operation even without a computer. Press and hold to switch between velocity mode and distance mode, turn to move the stage, and press to stop.

The stages connect to the USB 2.0 or RS-232 port of any computer and can be chained with several

units per chain. They can also be chained with any other Zaber products. Convenient locking, 4-pin, M8 connectors on the unit allow for easy and secure connection between products. The chain also shares power, so multiple X-Series products can use a single power supply.

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

## X-RSW-E Series Part Numbering & Options



## X-RSW60A-E03 Drawings

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

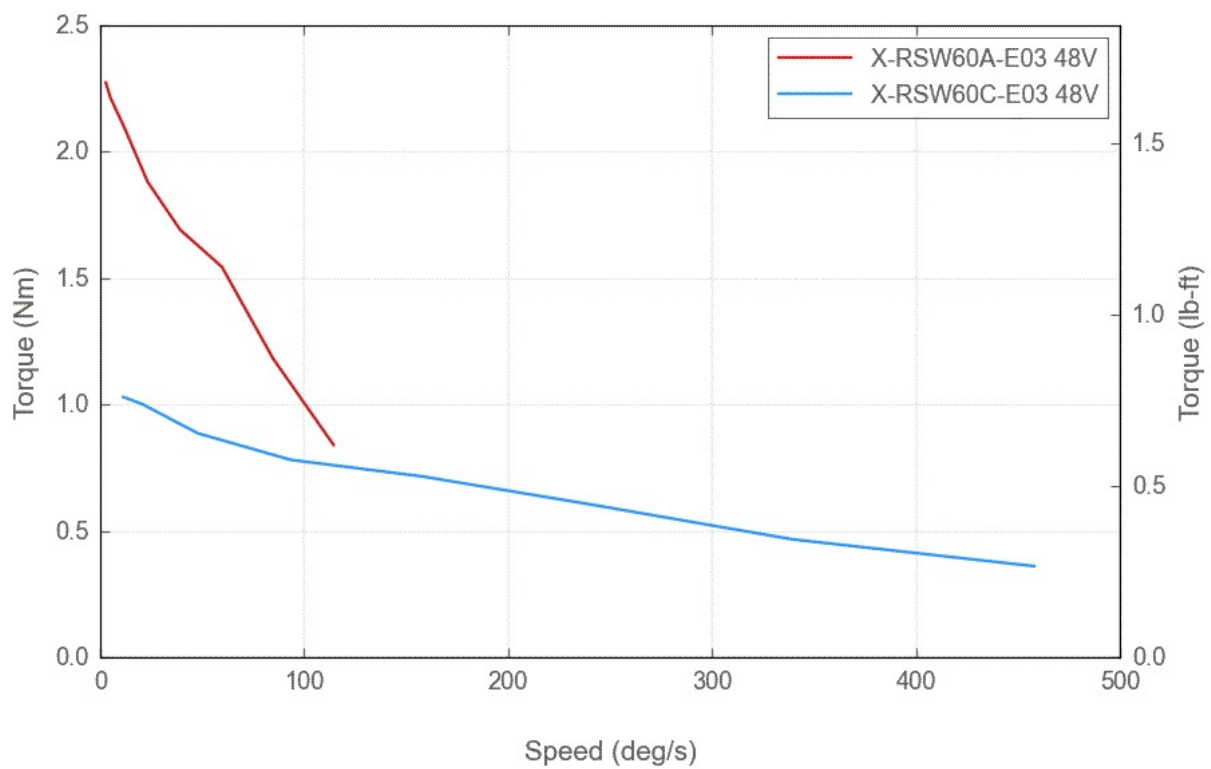
## X-RSW60A-E03 Specifications

<b>Microstep Size (Default Resolution)</b>	<b>0.000234375° (4.091 μrad)</b>
Built-in Controller	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
Communication Interface	RS-232
Communication Protocol	Zaber ASCII (Default), Zaber Binary
Data Cable Connection	Locking 4-pin M8
Maximum Continuous Torque	225 N-cm (318.6 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")
Power Supply	24-48 VDC
Power Plug	2-pin Screw Terminal
Maximum Current Draw	950 mA
Angular Motion Per Motor Rev	3°
Motor Type	Stepper (2 phase)
Motor Rated Current	1500 mA/phase
Inductance	1 mH/phase
Default Resolution	1/64 of a step
Mechanical Drive System	Precision Worm Gear

<b>Microstep Size (Default Resolution)</b>	<b>0.000234375° (4.091 μrad)</b>
Limit or Home Sensing	Magnetic home sensor
Manual Control	Yes
Operating Temperature Range	0-50 °C
CE Compliant	Yes
Vacuum Compatible	No
Weight	0.67 kg (1.477 lb)

## X-RSW-E Series Charts

### Torque Speed Performance



## Contact

Email: [contact@zaber.com](mailto:contact@zaber.com)

Phone (toll free Canada/USA): 1-888-276-8033

Phone (direct): 1-604-569-3780

Fax: 1-604-648-8033

Zaber Technologies Inc.

#2 - 605 West Kent Ave. N.

Vancouver, British Columbia

Canada, V6P 6T7

<https://www.zaber.com>