

# X-RSM-E Series Datasheet

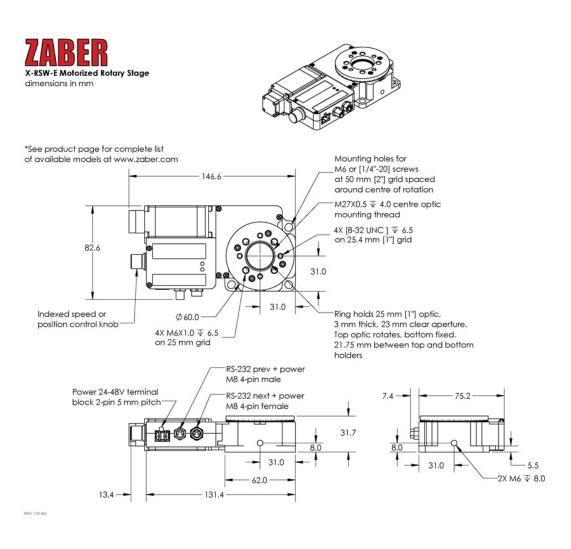


- Worm gear driven for continuous rotation
- Two lens holders allow for use as a polarizer mount
- Speed up to 75 rpm and torque up to 2.25 N-m
- Encoder position feedback with slip/stall detection and automatic recovery
- Built-in controller; daisy-chains with other Zaber products
- Multiple X-Series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

Zaber's X-RSM-E Series rotation stages are our most compact stepper and worm gear driven devices. These are stand-alone units requiring only a power supply. An indexed knob provides convenient manual control for versatile operation even without a computer. These stages connect to the RS-232 port or USB port of any computer, and they can be daisy-chained with any other Zaber products. The daisy-chain also shares power, making it possible for multiple X-Series products to share a single power supply.

Self-aligning feet and mounting points make it easy to set up multi-axis tilt or gimbal systems using the GSM tilt devices or AP146 and AB147 brackets.

#### Drawings

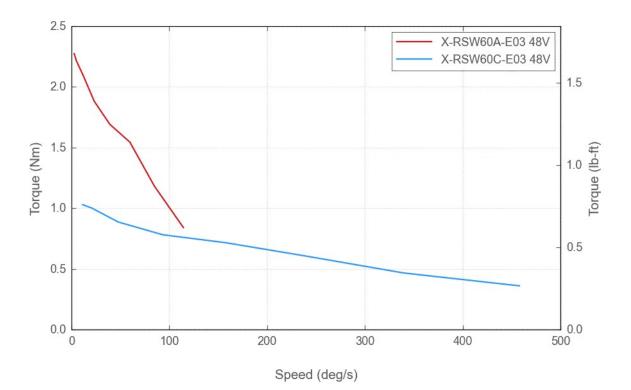


## Specifications

Specification	Value	Alternate Unit
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
Encoder Resolution	200 CPR	800 states/rev
Encoder Type	Rotary quadrature encoder	
Communication Interface	RS-232	
Communication Protocol	Zaber ASCII (Default), Zaber Binary	
Maximum Centered Load	200 N	44.9 lb
Maximum Cantilever Load	410 N-cm	580.6 oz-in
Stage Top Dimension	60 mm	2.362 "
Maximum Current Draw	950 mA	
Power Supply	24-48 VDC	
Power Plug	2-pin Screw Terminal	
Motor Type	Stepper (2 phase)	
Motor Rated Current	1500 mA/phase	
Inductance	1 mH/phase	
Default Resolution	1/64 of a step	
Data Cable Connection	Locking 4-pin M8	
Mechanical Drive System	Precision Worm Gear	
Limit or Home Sensing	Magnetic home sensor	
Manual Control	Yes	
Vacuum Compatible	No	
Operating Temperature Range	0-50 °C	
RoHS Compliant	Yes	
CE Compliant	Yes	
Weight	0.67 kg	1.477 lb

Part Number	Microstep Size (Default Resolution)	Maximum Speed	Minimum Speed	Maximum Continuous Torque
Part Number	Angular Motion Per Motor Rev			

### Charts



### Torque Speed Performance