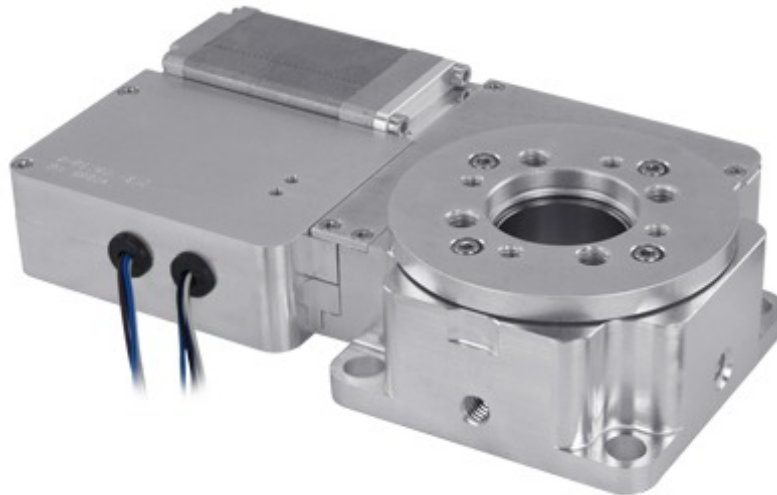


X-RSW-SV2 Series Datasheet



- Vacuum compatible to 10^{-6} Torr
- Worm gear driven for continuous rotation
- 20 kg load capacity
- Speed up to 100 °/s and torque up to 100 N-cm
- Integrated stepper motor controller and motor driver allows for easy-to-use control
- Only 4 feedthrough wires required to control all units in the daisy-chain via serial port (with an X-PIB adaptor)

Overview

For more information about the basics of a vacuum system and considerations to keep in mind when gathering requirements for your application, read our technical article, "Motion Device Design Considerations for Vacuum Applications".

Zaber's X-RSW-SV2 Series devices are high-vacuum compatible, computer-controlled, motorized rotary stages with built-in controllers. They are stand-alone units requiring only a standard 24 - 48 V power supply.

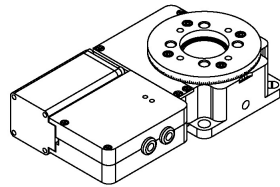
These stages connect to the RS-232 port or USB port of any computer, and they can be daisy-chained with any other Zaber products. The daisy-chain also shares power, making it possible for multiple X-Series products to share a single power supply.

The X-RSW-SV2 is designed with vacuum compatible materials to minimize outgassing and allow for faster pump down times. Like all of Zaber's products, the X-RSW-SV2 Series is designed to be 'plug and play' and very easy to set up and operate.

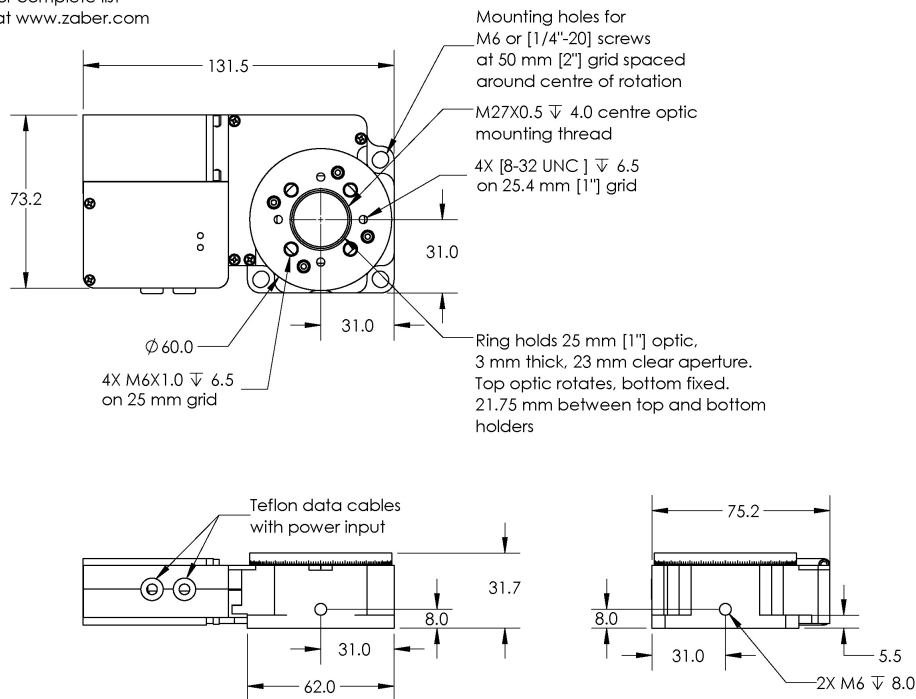
Drawings

ZABER

X-RSW-SV Vacuum Compatible Motorized Rotary Stage
dimensions in mm



*See product page for complete list of available models at www.zaber.com



DWG 1561 R01

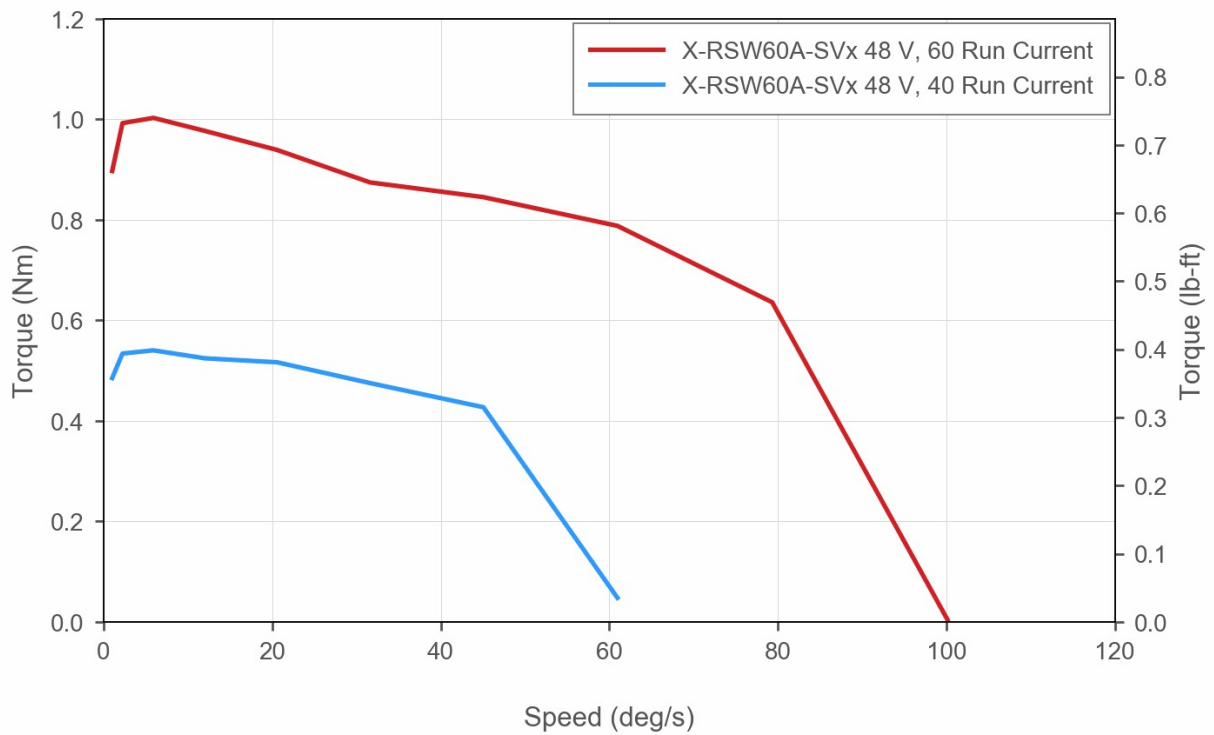
Specifications

Specification	Value	Alternate Unit
Microstep Size (Default Resolution)	0.000234375 °	4.091 µrad
Built-in Controller	Yes	
Range	360 °	
Accuracy (unidirectional)	0.14 °	2.443000 mrad
Repeatability	< 0.02 °	< 0.349 mrad
Backlash	< 0.04 °	< 0.698 mrad
Maximum Speed	100 °/s	16.7 rpm
Minimum Speed	0.000143 °/s	2.496 µrad/s
Encoder Type	None	
Communication Interface	RS-232	
Communication Protocol	Zaber ASCII (Default), Zaber Binary	
Maximum Torque	100 N-cm	141.6 oz-in
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	None, use X-PIB	
Angular Motion Per Motor Rev	3 °	
Motor Steps Per Rev	200	
Motor Type	Stepper (2 phase)	
Motor Rated Current	1300 mA/phase	
Inductance	1 mH/phase	
Default Resolution	1/64 of a step	
Data Cable Connection	Teflon flying leads with M8 4 pin M/F	
Mechanical Drive System	Precision Worm Gear	
Limit or Home Sensing	Magnetic home sensor	
Manual Control	No	
Vacuum Compatible	High vacuum (10 ⁻⁶ Torr)	
Operating Temperature Range	0-50 °C	
RoHS Compliant	Yes	

Specification	Value	Alternate Unit
CE Compliant	Yes	
Weight	0.72 kg	1.587 lb

Charts

Torque Speed Performance



Recommended Duty Cycle

