Zaber Technologies Inc.
#2 - 605 West Kent Ave.
Vancouver, BC

1-604-569-3780 *Direct*
1-888-276-8033 *Toll Free*
1-604-648-8033 *Fax*

X-RSW60C Datasheet



- Speed up to 75 rpm and torque up to 2.25 N m
- 20 kg centred load capacity
- 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
- Multiple X-Series products in a daisy-chain can share a single power supply
- Custom versions available

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X-RSW60C Overview

Zaber's X-RSW Series products are motorized rotary stage devices with built-in controllers. Rated for 2.25 N m of torque they are ideal for high precision, angular positioning applications.

They are stand-alone units requiring only a standard 24-48 V power supply. 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 position 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 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?part=X-RSW60C

X-RSW60C Part Numbering & Options

Part number: X-RSW60C

X-RSW 60 C

Rotation Stage Diameter	Worm Gear Ratio
60 — **60 mm (this part)**	**A** — 120:1
	C — **30:1 (this part)**

X-RSW60C Drawings

• X-RSW.png (Drawing for the X-RSW motorized rotary stage with built-in controllers)

• View all drawings and documents at zaber.com

X-RSW60C Specifications

Overview

Specification	Value
Built-in Controller	Yes
Range	+/-360 °
Manual Control	Yes

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Weight	0.66 kg (1.455 lb)

Positioning Performance

Specification	Value
Accuracy (unidirectional)	0.08 ° (1.396 mrad)
Repeatability	<0.02 ° (<0.349 mrad)
Backlash	<0.04 ° (<0.698 mrad)
Microstep Size (Default Resolution)	0.0009375 ° (16.362 µrad)
Default Resolution	1/64 of a step

Load Performance

Specification	Value
Maximum Continuous Torque	1.05 N·m (0.775 lb·ft)
Maximum Centred Load	200 N (44.9 lb)
Maximum Moment (Tilt)	410 N·cm (580.6 oz·in)

Speed

Specification	Value
Maximum Speed	450 °/s (75 rpm)
Minimum Speed	0.000572 °/s (9.983 µrad/s)
Speed Resolution	0.000572 °/s (9.983 µrad/s)

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Encoder & Sensing

Specification	Value
Encoder Type	None
Limit or Home Sensing	Magnetic home sensor

Motor

Specification	Value
Angular Motion Per Motor Rev	12 °
Motor Steps Per Rev	200
Motor Type	Stepper (2 phase)
Motor Rated Current	1500 mA/phase
Motor Winding Inductance	1 mH/phase

Power and Communication

Specification	Value
Communication Interface	RS-232
Communication Protocol	Zaber ASCII (default), Zaber Binary
Data Cable Connection	Locking 4-pin M8
Power Supply	24-48 VDC
Power Plug	2-pin screw terminal
Maximum Current Draw	950 mA

Mechanical

Specification	Value
Stage Top Dimension	60 mm (2.362 ")
Mechanical Drive System	Precision worm gear

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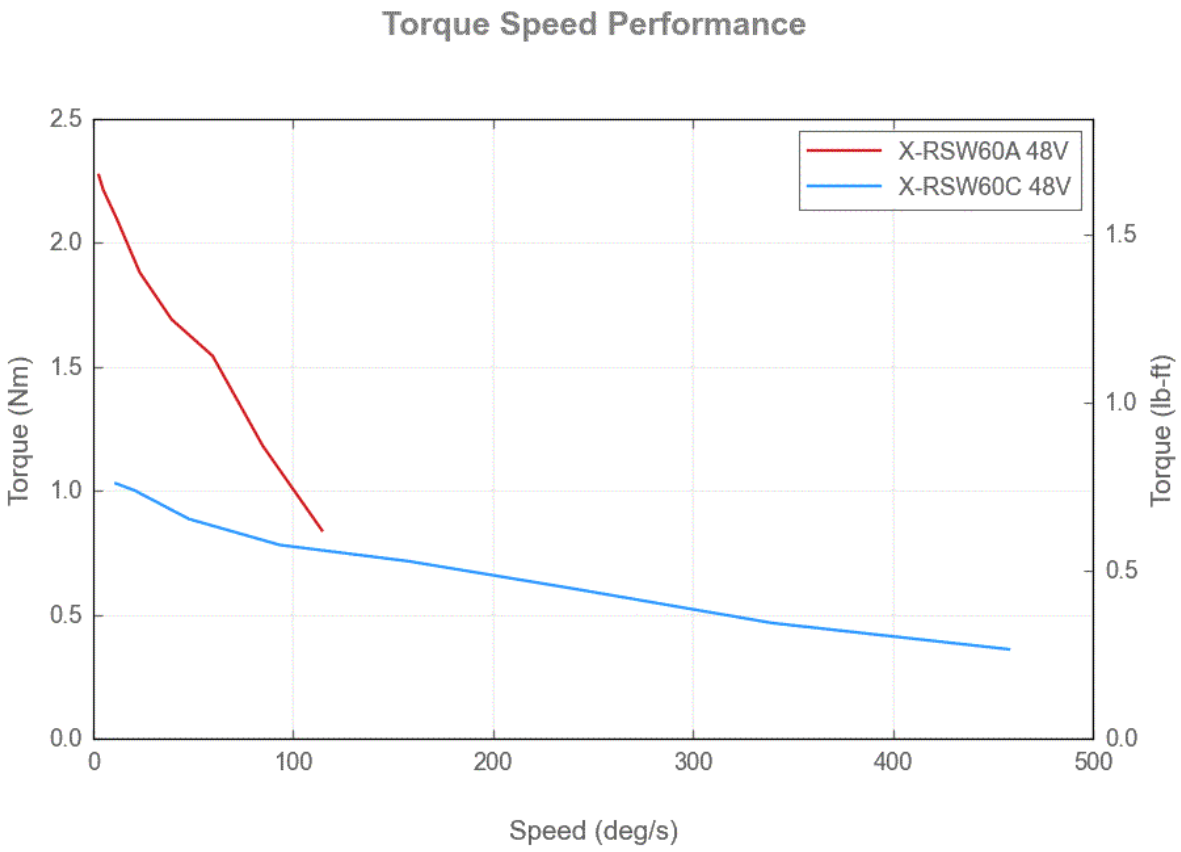
Environmental & Compliance

Specification	Value
Operating Temperature Range	0-50 °C
CE Compliant	Yes
Vacuum Compatible	No

X-RSW60C Charts

Speed



Contact

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