

450mm Travel, Motorized Linear Stage, Integrated Controller

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150mm Travel, Motorized Linear Stage, #15-289



Stock **#22-222** 1 In Stock

-

1

+

£3,292⁰⁰

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Volume Pricing	
Qty 1+	£3,292.00 each
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i Prices shown are exclusive of VAT/local taxes

Product Downloads

General	
Universal (Metric & English)	Type:
No	Encoder:
Yes	Manual Control/ LED Indicators:

	Manufacturer:
Zaber Technologies Inc.	

	Note:
Requires a 24-48 VDC power supply and either #15-295 for USB connectivity or #15-297 for RS-232 connectivity. A data cable (#15-296 or #15-299) can be used to daisy chain multiple stages together to control simultaneously.	

	Type of Motor:
2-Phase Stepper	

Physical & Mechanical Properties

	Type of Movement:
Linear (X)	
	Guide System:
Recirculating Ball Linear Guide	
	Stage Size (mm):
65 x 645.5	
	Travel (mm):
450	
	Accuracy (µm):
75 (unidirectional)	
	Backlash (µm):
<18	
	Height (mm):
35.8	
	Load Capacity (kg):
50	
	Repeatability (µm):
<3	
	Speed (mm/s):
0.0003 to 240	
	Thrust (N):
<75	
	Weight (kg):
2.3	

Optical Properties

	Resolution (µm):
0.49609375	

Electrical

	Maximum Operating Current (mA):
<1450	

Hardware & Interface Connectivity

	Type of Drive:
Precision Lead Screw	
	Power Supply:
Power Supply Required and Sold Separately: USA: #15-294 Europe: #15-294 Japan: #23-662 Korea: #33-773 China: #15-294	
	Computer Interface:
USB with #15-295 RS-232 with #15-297	

Environmental & Durability Factors

	Operating Temperature (°C):
0 - 50	

Regulatory Compliance

	RoHS 2015:
Compliant	
	Certificate of Conformance:
View	
	Reach 247:
Compliant	

Product Details

- High Speed, 75mm, 150mm, 300mm, 450mm, and 600mm Travel Options
- Controlled Manually or via RS-232 Serial Interface
- Available with Integrated, 500 Counts per Revolution (CPR) Motor Mounted Encoder
- No Adapter Required for X-Y-Z Configurations

Zaber™ Long Travel Motorized Stages are computer-controlled stages capable of translation speeds of up to 280mm/s with 0.5µm resolution. Zaber™ Long Travel Motorized Stages can also be controlled using the [Zaber™](#)

Programmable Joystick Controller (sold separately), a computer using an optional RS-232 or USB data cable, or manually with the knob integrated into the motor unit. X-Y-Z configurations are easily assembled without the use of additional adapters. Encoder versions are available for all travel lengths, with 500 Counts per Revolution (CPR) rotary quadrature encoders integrated into the stepper motor. The integrated rotary encoder provides closed-loop control and slip/stall detection and recovery.

Note: 24-48 VDC universal power supply, data cables for daisy chaining, and computer interface cables (USB or RS-232) are sold separately as accessories. Dust Cover Kits for all travel lengths can be found in the accessories tab, and are ideal for preventing dust particles from reaching the lead screw drive mechanism.

Technical Information

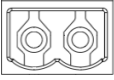
Device Overview / Connectors

Images are shown looking into the device.

Power

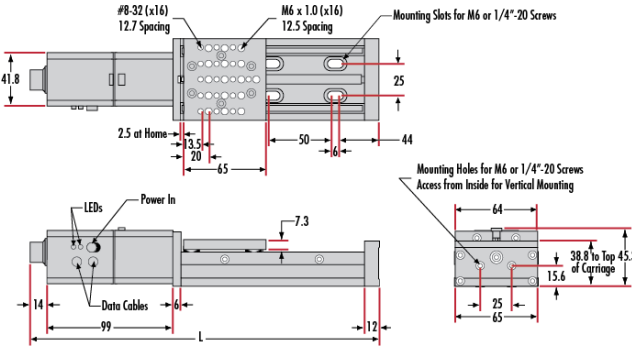
1

2



Pin	Description
1	24 - 48 V
2	GND (Note: power supplies ground this pin to AC Earth)

Note: To prevent damage to the device due to static buildup, the device should be properly grounded. The power supplies for X-Series devices are non-isolated and thus ground the device chassis to Earth via the negative terminal of the power supply. If for any reason you are using an isolated power supply, please ensure your device is grounded by connecting the negative terminal of the power connector to AC Earth.



Technical drawings of the device showing dimensions and mounting details:

- Top View:** Shows the overall length (L) and width (41.8). Mounting slots for M6 or 1/4"-20 screws are indicated. Dimensions include 12.7 spacing for #8-32 screws, 12.5 spacing for M6 x 1.0 screws, and 2.5 at Home.
- Side View:** Shows the height (25) and mounting slots for M6 or 1/4"-20 screws. Dimensions include 44, 50, 6, and 65.
- Front View:** Shows the LED indicator, power in, and data cables. Dimensions include 14, 99, 6, 7.3, and 12.
- Mounting Holes:** Detailed view of the mounting holes for M6 or 1/4"-20 screws, showing access from inside for vertical mounting. Dimensions include 64, 25, 65, 38.8 to Top of Carriage, 15.6, and 45.3.