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# 500mm Travel, High Load Capacity, Motorized Linear Stage, Integrated Controller with Encoder

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Zaber™ High Load Capacity Motorized Linear Stage

Stock #25-174 **1 In Stock**

1  MRP ₹5,08,486

Price inclusive of all taxes

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## Product Downloads

### General

Metric **Type:**

Yes **Encoder:**

Yes **Manual Control/ LED Indicators:**

**Manufacturer:**

**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:**  
Stepper (2 Phase)

**Encoder Type:**  
Rotary Quadrature Encoder

## Physical & Mechanical Properties

**Type of Movement:**  
Linear (X)

**Guide System:**  
Recirculating Ball Linear

**Stage Size (mm):**  
817.6 x 131.0

**Travel (mm):**  
500mm

**Accuracy (µm):**  
225 (unidirectional)

**Backlash (µm):**  
<25

**Height (mm):**  
57.2

**Load Capacity (kg):**  
510

**Repeatability (µm):**  
<4

**Speed (mm/s):**  
0.0002 to 240

**Thrust (N):**  
1200

**Weight (kg):**  
5.758

**Encoder Resolution:**  
400 CPR

**Cantilevered Load Capacity (N·m):**  
120

## Optical Properties

**Resolution (µm):**  
0.390625

## Electrical

**Maximum Operating Current (mA):**  
3600

## Hardware & Interface Connectivity

**Type of Drive:**  
Precision Ball Screw

**Power Supply:**  
24-48 VDC

**Computer Interface:**  
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](#)

**Country of Origin:**  
Canada

**Imported By:**  
Edmund Optics India Private Limited  
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## Product Details

- High Load Capacity of 510kg
- 500 and 1000mm Travel Options
- Integrated Controller and Encoder with 400 Counts per Revolution (CPR)

Zaber™ High Load Capacity Motorized Linear Stages feature a load capacity of 510kg (5003N) making them ideal for factory automation applications where precise linear adjustments of heavy components are necessary. These stages include a rotary quadrature encoder integrated into the stepper motor with 400 Counts per Revolution (CPR), as well as closed-loop control and slip/stall detection and recovery. Zaber™ High Load Capacity Motorized Linear Stages have an indexed knob providing versatility of analog control in the absence of digital input, as well as a flexible stainless steel dust cover to prevent the ingress of small particulates.

**Note:** A 24-48 VDC universal power supply (required), data cables for daisy chaining, and computer interface cables (USB or RS-232) are sold separately.

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