



Motorized Actuators, DC Servo-Motor

Specifications

- **Models:** Z606, Z612, Z612B, Z625B
- **Travel Range:** 6, 12, & 25mm
- **Minimum Incremental Motion:** < 0.05µm
- **Motor Type:** 12V DC Servo-Motor
- **Encoder:**
 - Motor-mounted Rotary Encoder
 - 12,288 Counts/Rev. of Lead Screw
- **Limit Switches:** Electro-mechanical
- **Backlash:** < 8µm
- **Speed Range:** 50-425µm/s
- **Gear Reduction:** 256:1
- **Lead Screw Pitch:** 0.5mm
- **Axial Load Capacity:** 45N



Our new Z-series motorized actuators provide reliable motion control in a lightweight, durable, and compact package. Three travel options: 6mm, 12mm, and 25mm allow the Z-Series actuators to serve as drop-in replacements for manual actuators in many of our popular opto-mechanical mounts and positioners. The Z-Series motorized actuators utilize a 12V DC servo-motor and gear head for the drive elements. These features, along with a high resolution optical encoder (12,288 counts/rev), ensure extremely small incremental movements (approximately 0.05µm). Vacuum versions are available (See page 376).

- 6mm, 12mm & 25mm Versions Available
- High Precision Rotary Encoder
- 12V DC Servo-motor
- Precision Limit Switches to Prevent Damage
- Compatible with Most Standard Controllers/Drivers

NEW OptoDC MOTOR DRIVER

For More Details See Page 333



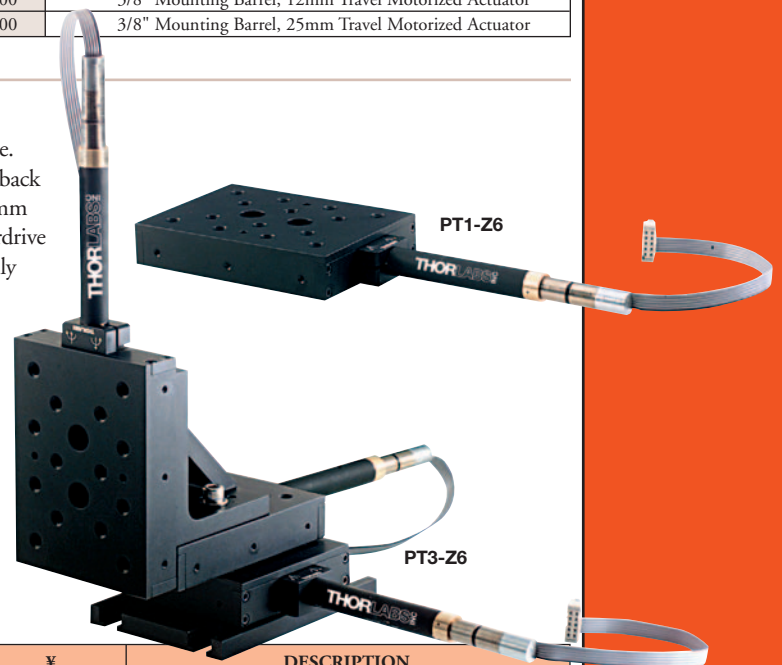
ITEM#	\$	£	€	¥	DESCRIPTION
Z606	\$ 427.25	£ 320.44	€ 448,61	¥ 72,632	1/4"-80 Threads, 6mm Travel Motorized Actuator
Z612	\$ 429.50	£ 322.12	€ 450,98	¥ 73,015	1/4"-80 Threads, 12mm Travel Motorized Actuator
Z612B	\$ 420.00	£ 315.00	€ 441,00	¥ 71,400	3/8" Mounting Barrel, 12mm Travel Motorized Actuator
Z625B	\$ 450.00	£ 337.50	€ 472,50	¥ 76,500	3/8" Mounting Barrel, 25mm Travel Motorized Actuator

Universal Design-Imperial and Metric Compatible

1" Motorized Translation Stages

The PT3-Z6 and the PT1-Z6 motorized stages provide a 1" total travel range. The motorized actuators allow sub-micron control and provide position feedback via an optical encoder. A 12V DC servo motor and gear head rotate the 0.5mm pitch lead screw that drives the stage, and built-in limit switches provide overdrive protection. Thorlabs motorized actuators are one of the smallest commercially available; combining these actuators with our compact high precision translation stages results in an extremely compact sub-micron translator.

- Maximum Stage Travel: 1" Per Axis
- Angular Deviation: <200µrad Per Axis
- Optical Encoder with 12,288 Pulses/Rev. & 256:1 Gear Head for High Torque
- Built-In Limit Switches
- Right-handed Configuration, Field Changeable to Left Handed
- Horizontal Load: 90 lbs (40.9kg)
- Vertical Load: 20 lbs (9.1kg)



ITEM#	METRIC ITEM#	\$	£	€	¥	DESCRIPTION
PT1-Z6	PT1/M-Z6	\$ 565.00	£ 423.75	€ 593,25	¥ 96,050	Single Axis Motorized Translation Stage, 1" Travel
PT3-Z6	PT3/M-Z6	\$1,738.00	£1,303.50	€1,824,90	¥ 295,460	Three Axes Motorized XYZ Translation Stage, 1" Travel

Translation Stages

Motorized Mirror Mounts

Rotation Stages

3 Axis Flexure Stages & Accessories

4, 5 & 6-Axis Stages

Drive Electronics & Auto-Alignment

Actuators & Adjusters