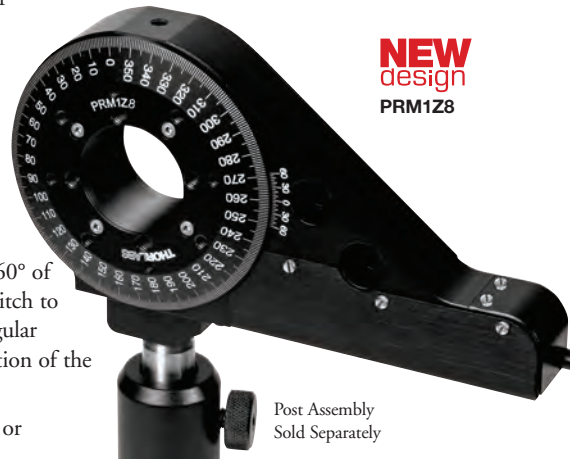


# Motorized High-Precision Rotation Mount for Ø1" Optics

The PRM1-Z8 is a small, compact, motorized rotation stage that accepts Ø1" optics and is based on our popular PRM1 rotation mount (see page 260).

Rotation is driven via a DC servo motor that is equipped with a 67:1 gearbox and a rotary encoder for accurate closed-loop position control. The TDC001 DC Servo Controller is the ideal companion for achieving smooth, continuous motion, which can be automated via the software interface. The user can measure the angular displacement by using either the software interface or the Vernier dial in conjunction with the graduation marks that are etched on the rotating plate in 1° increments. The precision DC motor actuator provides 25 arcsec incremental motion over the entire 360° of rotation. This rotation stage is also equipped with a precision home limit switch to facilitate automated rotation to the zero position, thus ensuring absolute angular positioning thereafter. The limit switch is designed to allow continuous rotation of the stage over multiple 360° cycles.

For complete flexibility, the stage can be mounted either vertically on a post or horizontally using an adapter plate (PRM1SP2).



Post Assembly Sold Separately

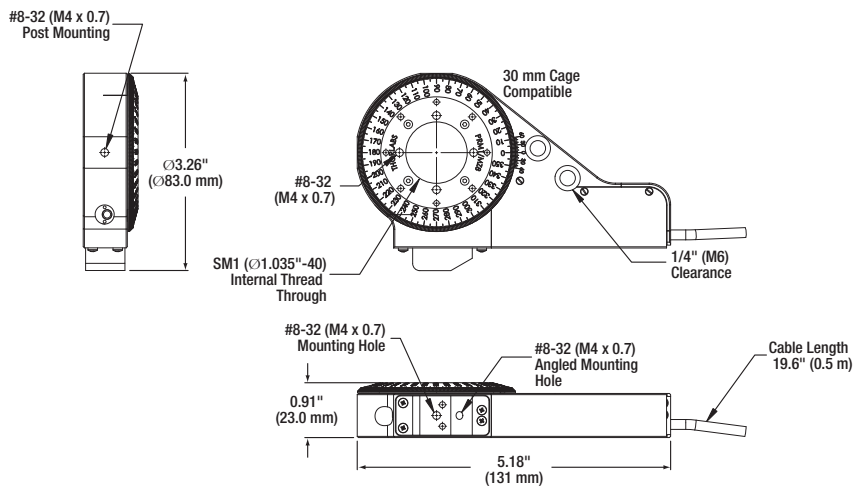
## Features

- 360° Coarse Rotation
- 1° Graduations on Main Dial
- Compact Design
- High Load Capabilities
- Precision Home Limit Switch
- Can be Used as a Stage or Rotation Mount
- Directly Accepts Ø1" Optics up to 0.50" (12.7 mm) Thick
- Fully Compatible with Our SM1 Lens Tubes Accessories (See Pages 123-135)

## Specifications

- Range: 360° Continuous Rotation
- Bidirectional Repeatability: ±0.1°
- Backlash: ±0.3°
- Rotational Velocity (Max): 25°/s
- On-Axis Load Capacity (Horizontal): 1.5 kg
- On-Axis Load Capacity (Vertical): 0.5 kg\*
- Min Achievable Incremental Motion: 25 arcsec
- Absolute On-Axis Accuracy: 0.1%
- Percent Accuracy (Max): 0.08%
- Home Location Accuracy: ±0.2°

\* Measured centrally on axis, 50 mm off the platform



**PRM1Z8E**

Compact Motorized Rotation Stage with Servo Motor Controller and Power Supply



ITEM#	METRIC ITEM#	\$	£	€	RMB	DESCRIPTION
PRM1Z8*	PRM1/MZ8*	\$ 820.00	£ 568.50	€ 728,10	¥ 6,924.10	Compact Motorized Rotation Stage
PRM1Z8E*	PRM1/MZ8E*	\$ 1,355.00	£ 939.40	€ 1,203,00	¥ 11,442.00	Compact Motorized Rotation Stage w/ Servo Motor Controller
PRM1SP1	PRM1SP1/M	\$ 40.00	£ 27.80	€ 35,60	¥ 337.80	Solid Adapter Plate
PRM1SP2**	PRM1SP2**	\$ 40.00	£ 27.80	€ 35,60	¥ 337.80	Horizontal Mounting Plate
PRM1SP3**	PRM1SP3**	\$ 40.00	£ 27.80	€ 35,60	¥ 337.80	Horizontal Mounting Riser Plate
SM1RR	SM1RR	\$ 4.50	£ 3.10	€ 4,00	¥ 38.00	Additional Ø1" Retaining Ring

\*One SM1RR retaining ring included with each unit.

\*\* Imperial and Metric Compatible