

For current pricing, please see our website.

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Motorized High-Precision Rotation Mount for Ø1" Optics

With a depth of only 23 mm (0.91"), the PRM1Z8 is a small, compact, motorized rotation stage and mount that accepts Ø1" optics and is based on our popular PRM1 Rotation Mount (see page 292). 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 user can measure the angular displacement by using the Vernier dial in conjunction with the graduation marks that are marked on the rotating plate in 1° increments. The precision DC motor actuator provides 1 arcsecond of resolution over the entire 360° of rotation.

This rotation stage/mount is also equipped with a precision home limit switch to facilitate automated rotation to the zero datum 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 the PRM1SP2 adapter plate featured on the next page.



Post Assembly Sold Separately

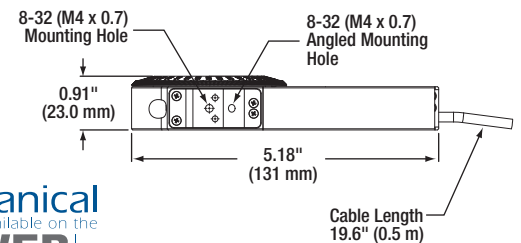
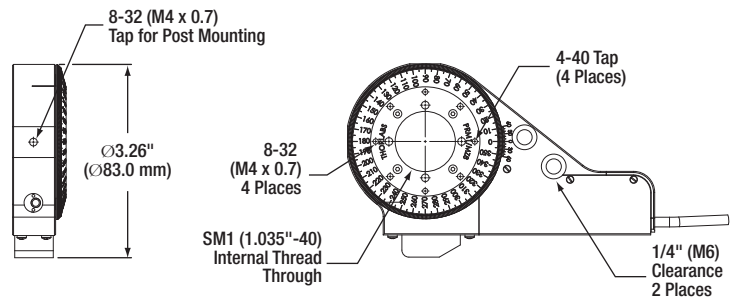
Specifications

- Range: 360° Continuous Rotation
- Bidirectional Repeatability: ±0.1°
- Backlash: ±0.3°
- Rotational Velocity (Max): 25 Degrees/s
- On-Axis Load Capacity (Horizontal): 1.5 kg
- On-Axis Load Capacity (Vertical): 0.5 kg*
- Achievable Incremental Motion (Min): 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

Features

- 1° Graduations on Main Dial
- 25 Degrees/s Rotational Velocity
- Compact Design is Only 23 mm Thick
- Home Limit Switch
- Can be Used as a Stage or Rotation Mount
- SM1 (1.035"-40) and 30 mm Cage Compatible
- Accepts Ø1" Optics up to 0.50" (12.5 mm) Thick



Mechanical Drawings Available on the WEB



PRM1Z8E

Compact Motorized Rotation Stage with DC Servo Motor Controller and Power Supply

The TDC001 DC Servo Controller is the ideal companion for achieving smooth, continuous motion that can be automated via the software interface. Please note that the TDC001 does not come with a power supply. Three options are available: the TPS001 single T-Cube power supply, the TPS008 power supply for up to eight T-Cubes, and TCH002 T-Cube hub, which can power up to six T-Cubes. Please see pages 620 - 621 for more information.

The stage/mount and controller are sold together with the item number PRM1Z8E and PRM1/MZ8E.

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
PRM1Z8*	PRM1/MZ8*	\$ 840.00	£ 604.80	€ 730.80	¥ 6,694.80	Compact Motorized Rotation Stage
PRM1Z8E*	PRM1/MZ8E*	\$ 1,291.50	£ 929.88	€ 1,123.61	¥ 10,293.26	Compact Motorized Rotation Stage w/ DC Servo Motor Controller
SM1RR	SM1RR	\$ 4.50	£ 3.24	€ 3.92	¥ 35.87	Additional Ø1" Retaining Ring
TPS001	TPS001	\$ 25.00	£ 18.00	€ 21.75	¥ 199.25	15 V Power Supply Unit for a Single T-Cube
TPS008	TPS008	\$ 175.00	£ 126.00	€ 152.25	¥ 1,394.75	15 V Power Supply Unit for up to 8 T-Cubes
TCH002	TCH002	\$ 726.90	£ 523.37	€ 632.40	¥ 5,793.39	T-Cube Controller Hub and Power Supply Unit

*One SM1RR retaining ring included with each unit.