

Motorized Rotation Stage

Receive a 10% Discount on the TDC001 When Ordering Both the CR1-Z7 and TDC001 Together (ITEM # CR1-7E)

- Continuous 360° Rotation with Low-Backlash Design
- High-Torque, DC Servo Motor with Gear Head and Optical Encoder
- High-Count Optical Encoder (12,288 pulses/rev)
- Angular Readout in 2° Increments Plus a Vernier Scale Provides 5 arcmin Precision
- Application Tested to 25 lbs (11.3 kg) Vertical Load
- Recommended Controller: TDC001



TDC001
DC Motor Controller
See Pages 626 – 627



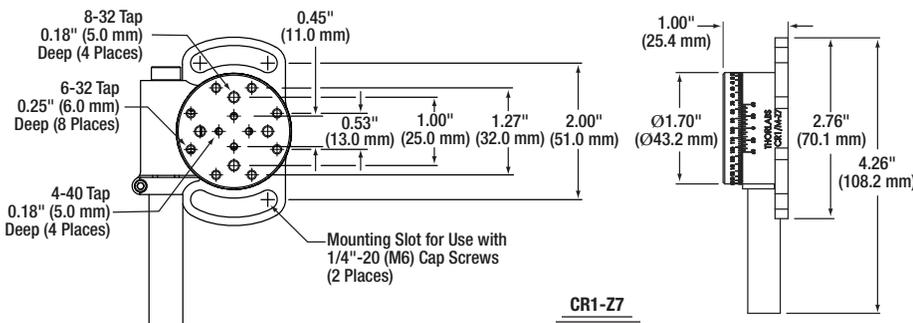
CR1-Z7
Motorized rotation stage only. See price box. Also available with a manual drive. See page 500.

The CR1-Z7 motorized rotation stage offers high-precision, continuous motion in a sturdy, compact package. The backlash-free worm-gear design, coupled with a high-resolution optical encoder, provides the rotational precision required in optical laboratories. The high-torque 12 VDC Servo Motor supplies ample power for rotating vertical loads up to 25 lbs (11.3 kg). The CR1A(M) attaches to the CR1-Z7 using the included 6-32 (M3) cap screws. The array of tapped holes in the CR1A(M) adapter plate allow for the mounting of a large variety of optics and components.

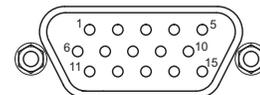
The CR1A Rotation Stage Adapter is designed to enhance mounting capabilities. It is equipped with a generous array of taps, allowing it to be used with a wide range of Thorlabs mounts and stages. The adapter is equipped with four 6-32 taps, one 1/4"-20 tap, six 4-40 taps, eight 2-56 taps, and four #6 (M4) clearance holes. A variety of components, including the PM3 and PM4 clamping arms, PH Series of Post Holders (see page 90), T12 Series of 1/2" Mini Translators (see pages 486 – 487), and GN Series of Goniometers (see pages 504 – 505) are then compatible with the stage.



CR1A



CR1-Z7



Pin	Description	Pin	Description
1	Ground	9	39K Identification Resistor
2	Not Connected	10	5 V Encoder Supply
3	Not Connected	11	Encoder Channel A
4	Not Connected	12	Not Connected
5	Motor -	13	Encoder Channel B
6	Not Connected	14	Not Connected
7	Motor +	15	Not Connected
8	Not Connected		Core Ground

Motor Connector Pin Out

ITEM #	METRIC ITEM #	\$	£	€	RMB	DESCRIPTION
CR1-Z7	CR1/M-Z7	\$ 813.60	£ 585.79	€ 707.83	¥ 6,484.39	Motorized Rotation Stage
CR1-Z7E*	CR1/M-Z7E*	\$ 1,349.10	£ 971.35	€ 1,173.72	¥ 10,752.33	Rotation Stage with DC Servo Motor Controller
CR1A	CR1A/M	\$ 24.00	£ 17.28	€ 20.88	¥ 191.28	Rotation Stage Adapter

*Price includes a 10% discount on the TDC001 drive module. Package Contents: CR1-Z7 Stage, TDC001 DC Motor Controller, and TPS001 Power Supply for the TDC001.