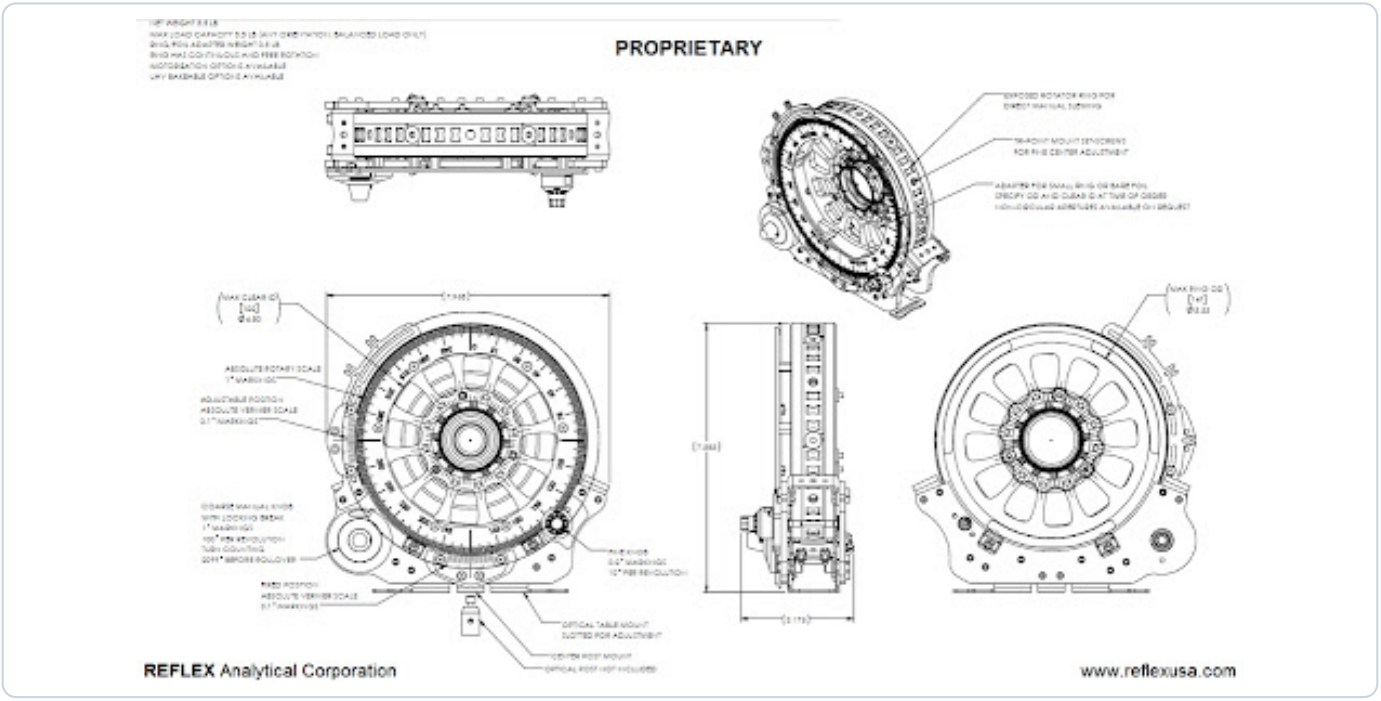
ULTRA-PRECISION MANUAL 360° ROTARY MOUNT

HIGH-ACCURACY CONTINUOUS OPTICAL ROTATION SYSTEM • PRODUCT DATASHEET



PRODUCT OVERVIEW

Engineered for demanding optical and photonics applications, the **Ultra-Precision Manual 360° Rotary Mount** delivers exceptional angular positioning accuracy, smooth continuous rotation, and robust mechanical stability. Designed to accommodate large apertures and heavy substrates, this mount integrates both coarse and fine adjustment controls alongside versatile mounting and upgrade pathways.

Continuous 360° Rotation: Unrestricted free-rotating ring with absolute 360° scale (1° markings) for rapid orientation and reference.

Dual-Speed Manual Control: Coarse knob (100°/rev, locking brake, turn counter to 2099°) and Fine knob (0.2° markings, 10°/rev).

Absolute Vernier Scales: Includes both fixed-position and adjustable-position absolute vernier scales (0.1° markings) for precise readouts.

Flexible Optic Coupling: Accommodates optics up to 5.55” OD (4.80” clear). Bare optics can be coupled via custom O-ring Foil Adapter.

TECHNICAL SPECIFICATIONS

Net Weight	3.50 lbs (1.59 kg) [Ring/Foil Adapter Weight: 0.50 lb]
Max Load Capacity	5.50 lbs (2.50 kg) — *Any orientation, balanced load only*
Max Substrate / Ring Weight	2.00 lbs (0.91 kg)
Max Optical Ring / Substrate OD	5.55” (141.0 mm)
Maximum Clear Aperture ID	4.80” (122.0 mm)
Max Substrate Thickness	0.50” (12.70 mm)
Overall Dimensions	7.968” W × 7.585” H × 3.175” D (202.4 mm × 192.7 mm × 80.6 mm)
Mounting Options	Slotted optical table mount; center post mount *(Post not included)*

MODULAR OPTIONS & UPGRADES

• **Motorization Package:** NEMA-14 frame 4-wire stepper motor actuating the ring at 0.05° (3 arc-minutes) per step. Micro-stepping easily drives actuation into the sub-arc-second range.