Beam Expanders With Sliding Collimation Adjustment

■ **Sliding Collimation Adjustment**   ■ **High Power Coatings**   ■ **UV Coatings**   ■ **Broadband Coatings**

The ELU, EL, and ELQ series of Galilean Beam Expanders can expand or reduce the diameter of a collimated beam with an introduced wavefront error of less than λ/4 (i.e. diffraction-limited performance). An expanded beam can be focused to a narrower diffraction limited waist while a reduced beam is sometimes necessary for use with optics or instruments with narrow input apertures like the SA200 family of scanning Fabry-Perot interferometers (see page 648).

The housing contains two best form lenses that are designed to minimize aberrations in the recollimated beam. Both optics have broadband AR coatings to minimize surface reflections. The input lens is mounted in a precision-milled tube that can slide in

and out of the tube containing the output lens. The sliding design allows for the adjustment of the collimating lens and minimizes the beam walk-off effect that is inherent to lens adjustments. The beam expander can be mounted via either the 1/4"-40 or the M4 threaded hole in the base. In addition, the groove milled in the base can be used to clamp the beam expander to an optical table by using CL6 mounting cleats (not included).The beam expanders have C-Mount threaded input apertures, which allow additional lenses and filters to be installed easily along the optical axis of the beam expander.

Features

- Diverge, Collimate, or Focus the Beam
- Non-Rotating Collimation Adjustment
- Removable End Cap Protects C-Mount Threading
- Best Form AR Coated Lenses
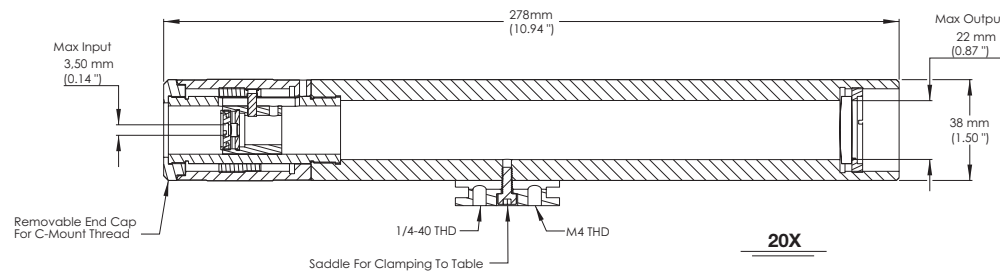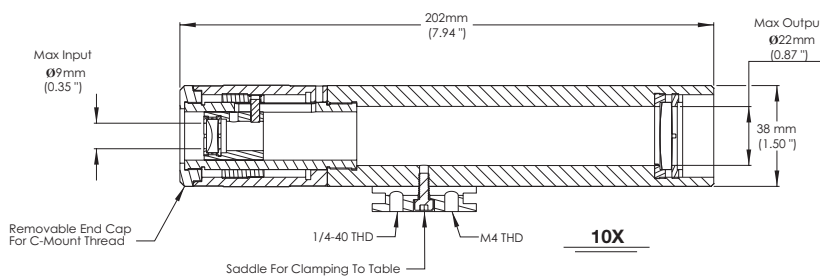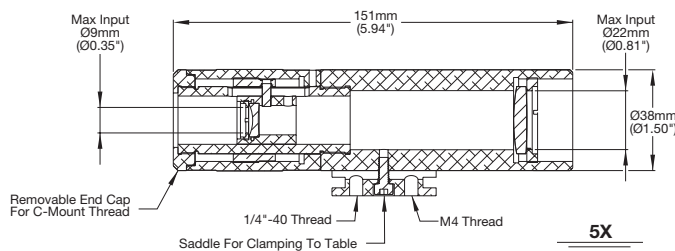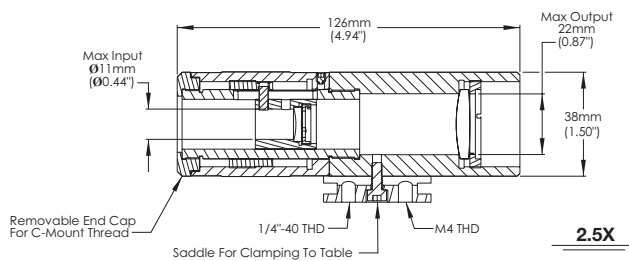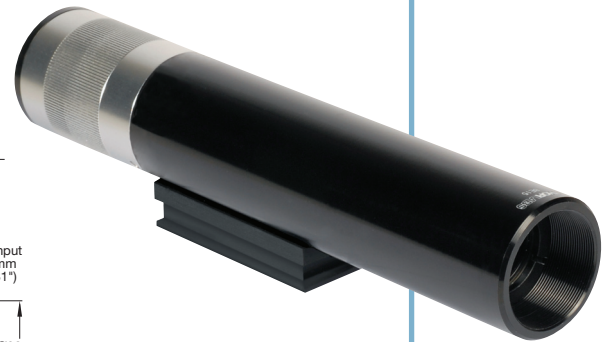
Specifications

- **Wavefront Error:** <λ/4 (Diffraction Limited)
- **Transmittance:** T>96%
- **Scratch-Dig:** 10-5

Max Input Ø11mm (Ø0.44") — 126mm (4.94") — Max Output 22mm (0.87") — 38mm (1.50")
Removable End Cap For C-Mount Thread — 1/4"-40 THD — M4 THD — Saddle For Clamping To Table — **2.5X**

Max Input Ø9mm (Ø0.35") — 151mm (5.94") — Max Input Ø22mm (Ø0.81") — Ø38mm (Ø1.50")
Removable End Cap For C-Mount Thread — 1/4"-40 Thread — M4 Thread — Saddle For Clamping To Table — **5X**

Max Input Ø9mm (0.35") — 202mm (7.94") — Max Output Ø22mm (0.87") — 38 mm (1.50")
Removable End Cap For C-Mount Thread — 1/4-40 THD — M4 THD — Saddle For Clamping To Table — **10X**

Max Input 3,50 mm (0.14") — 278mm (10.94") — Max Output 22 mm (0.87") — 38 mm (1.50")
Removable End Cap For C-Mount Thread — 1/4-40 THD — M4 THD — Saddle For Clamping To Table — **20X**