

Variable Beam Expander

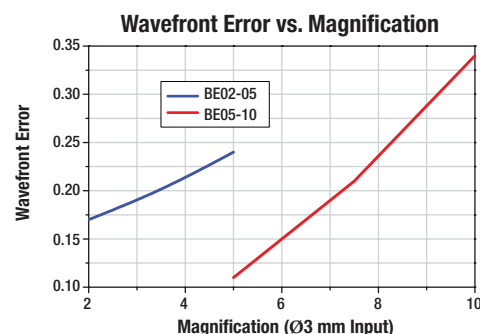
Specifications

- 20-10 Scratch-Dig
- $< \lambda/4$ Wavefront Error
- $R_{\text{avg}} < 0.5\%$ over Wavelength Range
- 100 W/cm² CW Damage Threshold

Thorlabs' BE series of variable Galilean beam expanders offer either 2X to 5X or 5X to 10X beam expansion. These lens-based expanders have antireflection-coated optics for maximum beam transmission and minimal back reflection over their respective wavelength range. Three coating ranges are available that cover 400 – 650 nm, 650 – 1050 nm, or 1050 – 1620 nm.

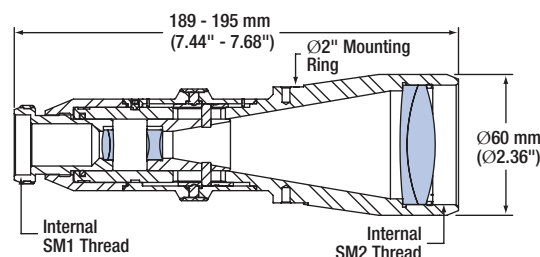
Each beam expander has a rotating zoom mechanism, which can be locked with a setscrew once the desired beam expansion is achieved. Lens-based beam expanders are well-suited for expanding or reducing the diameter of a collimated monochromatic beam. These expanders are suitable for a broad wavelength range and thus offer adjustable focus to compensate for the wavelength of light you are expanding or reducing.

For ease of integration into your setup, these beam expanders utilize our SM threading, which allows many components such as lens tubes (see page XXX) and mounted optics to be attached



without additional hardware. The BE02-05 series has an internally SM1-threaded input aperture and external SM2 threading on the output aperture. Our new BE05-10 series has SM2 threads on both the input and output as well as SM05 threading at the input aperture.

Mounting is possible on the BE02-05 via 8-32 and M4 x 0.7 taps. Its body has a 2" outside diameter for mounting in a kinematic mount such as the KS2 (see page XXX). The BE05-10 has a 1/4"-20 and an M6 x 1.0 tap for post mounting, while also featuring a base that can be clamped to a table using CL6 Mounting Clamps (see page XXX).



BE02-05



BE02-05

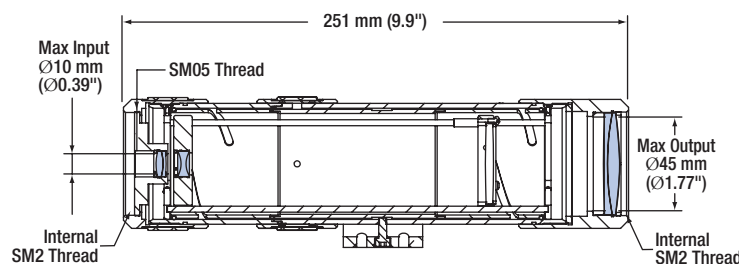
2X - 5X Beam Expanders

ITEM #	\$	£	€	RMB	WAVELENGTH RANGE	MAX 1/e ² BEAM DIAMETER*	INPUT APERTURE
BE02-05-A	\$ 1,155.00	£ 831.60	€ 1,004.85	¥ 9,205.35	400 – 650 nm	4.0 mm	Ø8.0 mm
BE02-05-B	\$ 1,155.00	£ 831.60	€ 1,004.85	¥ 9,205.35	650 – 1050 nm	4.0 mm	Ø8.0 mm
BE02-05-C	\$ 1,320.00	£ 950.40	€ 1,148.40	¥ 10,520.40	1050 – 1620 nm	4.0 mm	Ø8.0 mm

*For Diffraction-Limited Performance



BE05-10



BE05-10

5X - 10X Beam Expanders

Please refer to our website for complete models and drawings.

ITEM #	\$	£	€	RMB	WAVELENGTH RANGE	MAX 1/e ² BEAM DIAMETER*	INPUT APERTURE
BE05-10-A	\$ 1,895.00	£ 1,364.40	€ 1,648.65	¥ 15,103.15	400 – 650 nm	2.3 mm	Ø8.0 mm
BE05-10-B	\$ 1,895.00	£ 1,364.40	€ 1,648.65	¥ 15,103.15	650 – 1050 nm	2.3 mm	Ø8.0 mm
BE05-10-C	\$ 1,895.00	£ 1,364.40	€ 1,648.65	¥ 15,103.15	1050 – 1620 nm	2.3 mm	Ø8.0 mm

*For Diffraction-Limited Performance