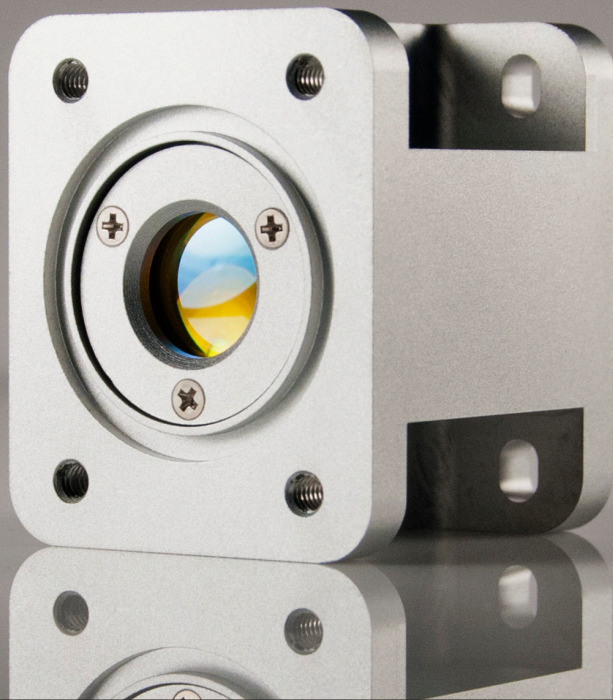


## BE-300 / BE-400 / BE-500 Beam Expander

(3x, 4x and 5x expansion)



### **Safeguard your ti-Series laser optics in dirty environments with a Synrad beam expander**

Ensure the ti-Series laser on your production line is safeguarded with extra protection from dirt, dust and processing vapors with a Synrad BE-300, BE-400 or BE-500 beam expanders

Small, lightweight and easy-to-install, our BE-Series Beam Expanders expand and collimate the beam diameter of your laser's output by 3x, 4x or 5x, to reduce or eliminate damaging hot-spots and optics damage that can sometimes occur in harsh operating environments.

Ruggedly crafted from a single block of aluminium and anodized for added corrosion resistance, BE beam expanders conveniently and easily mount to the front of ti-Series lasers via slotted holes on the input face for maximum adjustability and perfect alignment. O-ring gaskets on both ends of the unit ensure a snug

fit and fully airtight seal between the expander and the laser and also between the expander and any other optical components mounted to the threaded 8-32 UNC holes on the output face of the expander.

The interiors of BE-Series Beam Expanders are fully shielded from the operating environment and conform to IP6 standards while two ZnSe Galilean telescopic lenses ensure stability and maximum transmission of laser power.

For more information about Synrad BE-Series beam expanders and what you can do to protect your laser from the hazards of dirty operating environments, call Synrad today!



# BE-Series Beam Expanders

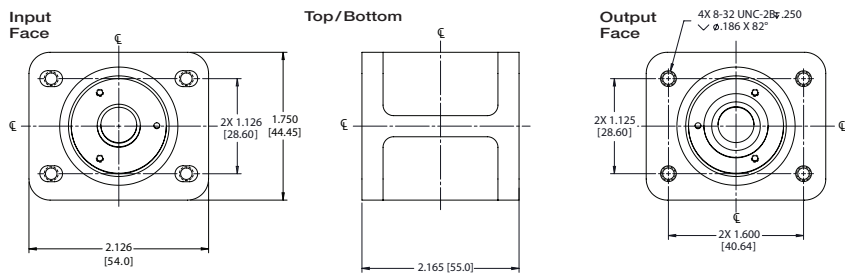
## Specifications

Model	BE-300	BE-400	BE-500
Expansion Ratio	3x	4x	5x
Clear Aperture	14 mm (0.551")	14 mm (0.551")	14 mm (0.551")
Cooling	Air	Air	Air
Optical Transmission	> 99%	> 99%	> 99%
Optical Attenuation	< 1%	< 1%	< 1%
Available Wavelengths	9.3 $\mu\text{m}$ , 10.6 $\mu\text{m}$	9.3 $\mu\text{m}$ , 10.6 $\mu\text{m}$	9.3 $\mu\text{m}$ , 10.6 $\mu\text{m}$
Dimensions (in)	2.126 x 1.750 x 2.165	2.126 x 1.750 x 2.375	2.126 x 1.750 x 2.460
Dimensions (mm)	54 x 44.45 x 55	54 x 44.45 x 60.33	54 x 44.45 x 62.5
Weight	213 g	224 g	238 g
Mounting	8-32 x 1/2" Cap Screw	8-32 x 1/2" Cap Screw	8-32 x 1/2" Cap Screw

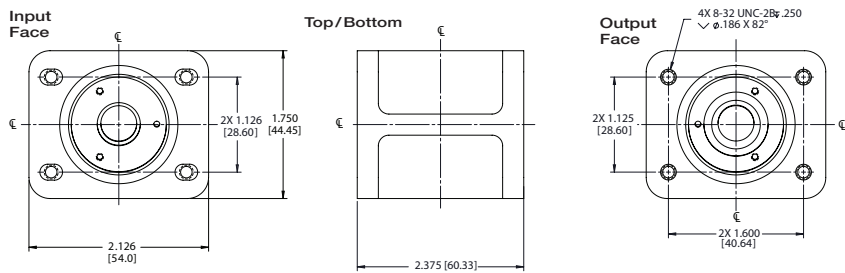
Beam specifications measured at  $1/e^2$ .

## Outline and Mounting

### BE-300



### BE-400



### BE-500

