

Iradion® Beam Expander for 16xx series

Models BE-2.5x-H, BE-3x-H, BE-4x-H and BE-6x-H



Small, lightweight and easy-to-install, our BE beam expanders enlarge the beam diameter and optimally collimate your laser's output by 2.5x, 3x, 4x and 6x. The larger beam diameter reduces dangerous hot-spots and risk of optical damage during machine operation, especially in harsh operating environments.

BE beam expanders are developed for higher power (>300 W) CO₂ laser operation without water cooling. The BE outer diameter and connecting thread (M30x1) are consistent across the magnification options for easy integration.

Features and Benefits

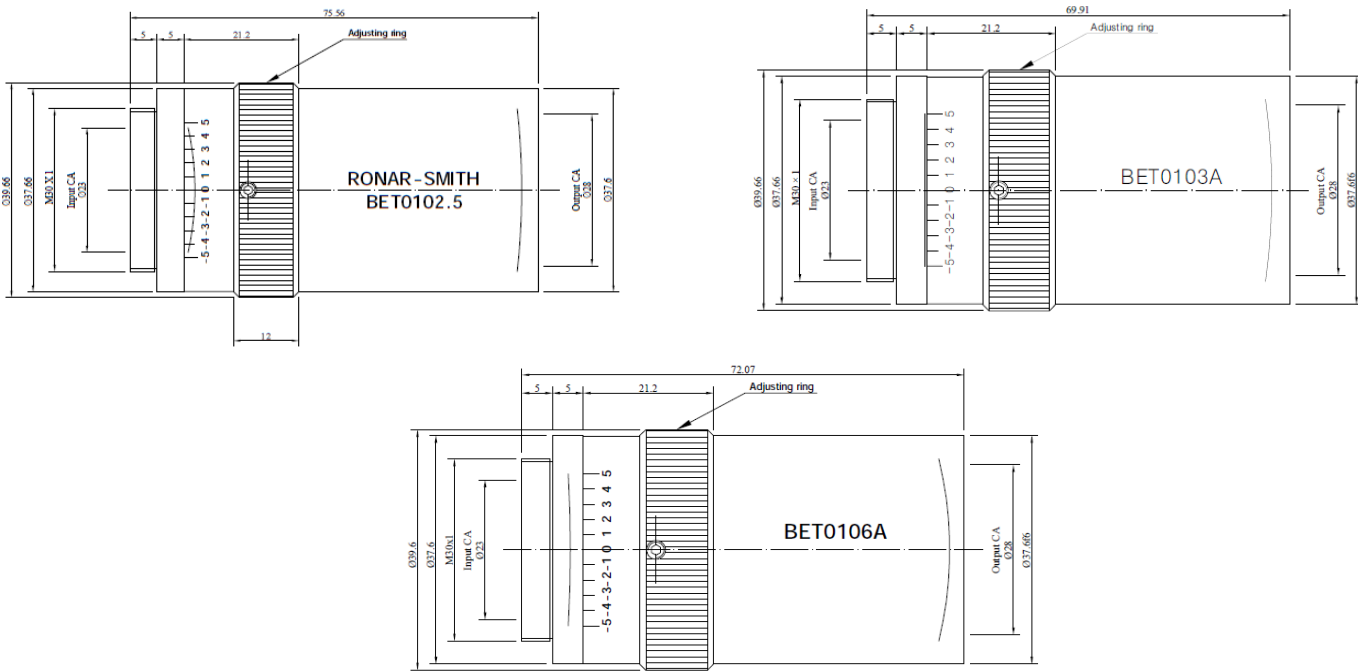
- For collimation of CO₂ laser beams.
- Standard fixed magnifications from 2.5x, 3x, 4x and 6x.
- Galilean telescope design reduces length of beam expander and avoids intermediate focus.
- Adjustable divergence enables fine tuning of output beam collimation.
- Ruggedly constructed BE beam expanders conveniently and easily mount to the front of Iradion Eternity and Infinity-series lasers for maximum adjustability and perfect alignment.
- Interior optical surfaces of BE beam expanders are shielded from the operating environment.
- BE series are a standard in the industry and were selected for their ideal balance of cost and performance.
- Includes mounting ring and optional extender piece.

Specifications

Model	BE-2.5x-H	BE-3.0x-H	BE-4.0x-H	BE-6.0x-H
Magnification*	2.5x	3.0x	4.0x	6.0x
Input Clear Aperture (mm)	20.0	20.0	20.0	20.0
Output Clear Aperture (mm)	28.0	28.0	28.0	28.0
Outer Diameter (mm)	39.6	39.6	39.6	39.6
Housing Length (mm)	75.56	69.91	75.21	72.07

*Other magnifications available upon request.
Specifications are preliminary and subject to change without notice.

Dimensions



Design Notes:

- CO₂ laser collimation for >300 W, without the need for water cooling.
- Galilean telescope beam expander geometry.
- Adjustable output beam divergence for optimizing collimation.

Iradion Laser Inc.,
One Technology Drive
Uxbridge, MA 01569
Tel: 1-401-762-5100
Fax: 1-401-762-5111

IRADION
Ceramic Core CO₂ Lasers
www.Iradion.com



Invisible Laser Radiation
Avoid eye Skin exposure to
direct or scattered radiation.
Class 4 Laser Product.

