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TECHSPEC<sup>®</sup> Broadband NIR 1X - 3X Research-Grade Variable Beam Expander



Research-Grade Variable Beam Expanders



Stock **#87-564** 3 In Stock

-

1

+

₹99,093

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| Qty 1-4        | ₹99,093 each                  |
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General

Beam Expander

Type:

Variable Magnification

Style:

Physical & Mechanical Properties

Length (mm):

|                                                                               |                                                       |
|-------------------------------------------------------------------------------|-------------------------------------------------------|
| 172.30                                                                        |                                                       |
| 577                                                                           | Weight (g):                                           |
| 58.2                                                                          | Housing Diameter (mm):                                |
| Optical Properties                                                            |                                                       |
| 10                                                                            | Entrance Aperture (mm):                               |
| 30                                                                            | Exit Aperture (mm):                                   |
| 1X - 3X                                                                       | Expansion Power:                                      |
| Fused Silica (Corning 7980)                                                   | Substrate: <input type="checkbox"/>                   |
| >95 @ DWL                                                                     | Transmission (%):                                     |
| 0 ±0.06                                                                       | Angle of Incidence (°):                               |
| BBAR (750-1100nm)                                                             | Coating:                                              |
| Broadband                                                                     | Design Wavelength DWL (nm):                           |
| <λ/5 @ 785nm for Input Beam ≤5mm                                              | Transmitted Wavefront, P-V:                           |
| 750 - 1100                                                                    | Wavelength Range (nm):                                |
| R <sub>avg</sub> <0.5% @ 780 - 950nm<br>R <sub>avg</sub> <1.0% @ 750 - 1100nm | Coating Specification:                                |
| 5 J/cm² @ 785nm, 10ns, 20Hz                                                   | Damage Threshold, By Design: <input type="checkbox"/> |
| Non-Rotating Optics                                                           | Divergence Adjustment:                                |
| 5 J/cm² @ 785nm, 10ns, 20Hz                                                   | Damage Threshold, Pulsed:                             |

|                                                                          |                   |
|--------------------------------------------------------------------------|-------------------|
| Threading & Mounting                                                     |                   |
| Input: Male C-Thread (1" x 32 TPI)<br>Output: Male T-Thread (M42 x 0.75) | Mounting Threads: |

|                                     |                             |
|-------------------------------------|-----------------------------|
| Regulatory Compliance               |                             |
| Compliant                           | RoHS 2015:                  |
| View                                | Certificate of Conformance: |
| Compliant                           | Reach 247:                  |
| United States                       | Country of Origin:          |
| Edmund Optics India Private Limited | Imported By:                |

## Product Details

- 1X– 3Xand 2X– 8XVariable Magnification
  - Non-Rotating Lenses Minimize Beam Wander
  - Compact Galilean Designs with Fixed Housing Length
  - TECHSPEC® Draconis® Broadband Beam Expanders Also Available
- TECHSPEC® Research-Grade Variable Beam Expanders (RVBX) are ideal for high power laser applications where magnification changes may be required, such as prototyping or R&D. TECHSPEC Research-Grade Variable Beam Expanders feature λ/4 transmitted wavefront, Galilean designs, and high laser damage threshold AR coatings to ensure maximum transmittance while minimizing ghost reflections. Additionally, these beam expanders use internal translation and focusing mechanisms to variable adjust magnification and laser divergence without affecting overall housing length. This compact design removes the need to make system accommodations for changes in length and eases system integration.
- TECHSPEC Research-Grade Variable Beam Expanders can be used to determine a system’s required beam magnification in the prototyping phase of development. TECHSPEC® Draconis® Broadband Beam Expanders are available for production or OEMimplementation. Please contact our [Sales Department](#) for custom magnification requirements.

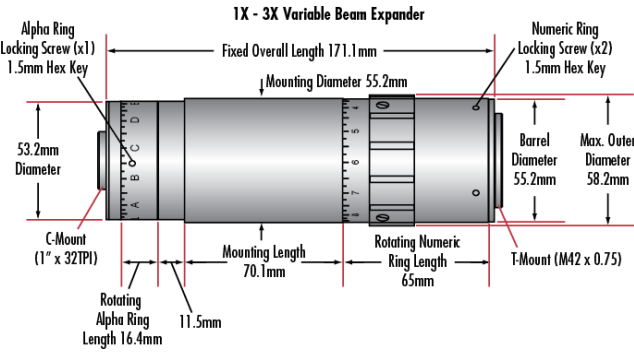
LASER OPTICS

MADE BY EDMUND OPTICS®

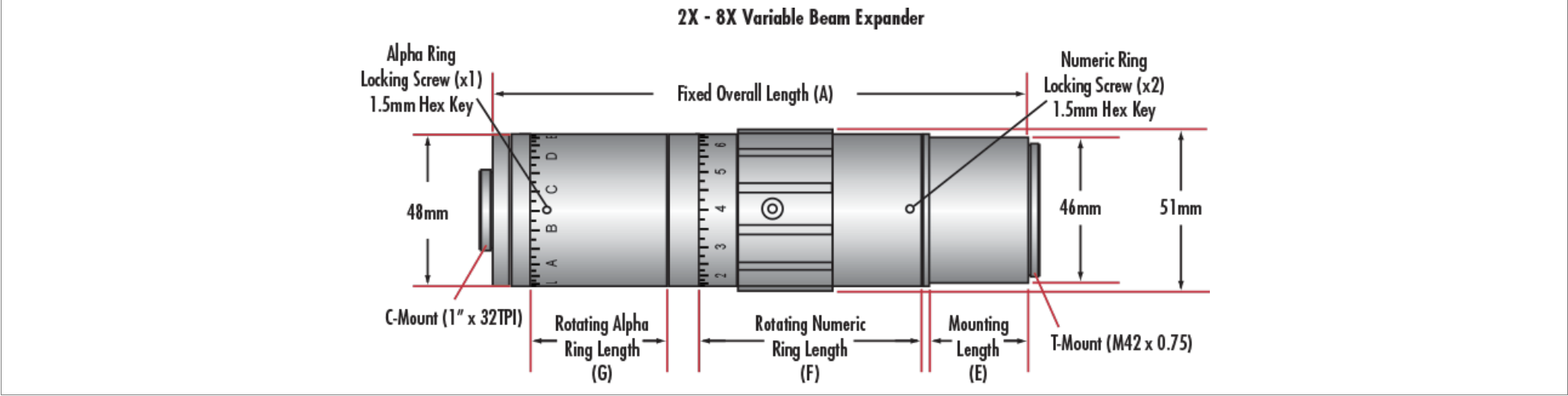


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## Technical Information



| Design Wavelength     | Stock No.               | Fixed Overall Length A (mm) | Mounting Length E (mm) | Rotating Numeric Ring Length F (mm) | Rotating Alpha Ring Length G (mm) |
|-----------------------|-------------------------|-----------------------------|------------------------|-------------------------------------|-----------------------------------|
| 355nm                 | <a href="#">#87-566</a> | 169.7                       | 35.9                   | 90.7                                | 19.4                              |
| 532nm                 | <a href="#">#87-567</a> | 169.3                       | 31.5                   | 70.4                                | 43.7                              |
| Broadband VIS (633nm) | <a href="#">#87-569</a> | 169.3                       | 31.5                   | 70.4                                | 43.7                              |
| Broadband NIR (785nm) | <a href="#">#87-570</a> | 169.3                       | 31.5                   | 70.4                                | 43.7                              |
| 1064nm                | <a href="#">#87-568</a> | 169.3                       | 31.5                   | 70.4                                | 43.7                              |



## Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).