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**TECHSPEC® 355nm 2X - 8X Research-Grade Variable Beam Expander**



355nm 2X - 8X Variable Beam Expander, #87-566

Stock **#87-566** CLEARANCE **2 In Stock**

⊖ 1 ⊕ **SS\$1,531<sup>00</sup>**

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**General**

Beam Expander **Type:**

Variable Magnification **Style:**

**Physical & Mechanical Properties**

169.00 **Length (mm):**

501 **Weight (g):**

Housing Diameter (mm):

## Optical Properties

Entrance Aperture (mm):  
15Exit Aperture (mm):  
30Expansion Power:  
2X - 8XSubstrate:   
Fused Silica (Corning 7980)Transmission (%):  
>95 @ DWLAngle of Incidence (°):  
0 ±0.06Coating:  
Laser V-Coat (266nm, 355nm)Design Wavelength DWL (nm):  
355Transmitted Wavefront, P-V:  
<math>\lambda/4</math> for Input Beam  $\leq 4\text{mm}$  (2X-6X)  
<math>\lambda/4</math> for Input Beam  $\leq 2\text{mm}$  (>6X)Wavelength Range (nm):  
260 - 365Coating Specification:  
R<sub>abs</sub> <math><0.25\%</math> @ 265 - 267nm  
R<sub>abs</sub> <math><0.25\%</math> @ 354 - 356nm  
R<sub>avg</sub> <math><1.0\%</math> @ 260 - 365nmDamage Threshold, By Design:   
1 J/cm<sup>2</sup> @ 10ns, 20Hz, 355nmDivergence Adjustment:  
Non-Rotating OpticsDamage Threshold, Pulsed:  
1 J/cm<sup>2</sup> @ 355nm, 10ns, 20Hz

## Threading & Mounting

Mounting Threads:  
Input: Male C-Thread (1" x 32 TPI)  
Output: Male T-Thread (M42 x 0.75)

## Regulatory Compliance

RoHS 2015:  
CompliantCertificate of Conformance:  
ViewReach 247:  
Compliant

## Need different specs or modifications?

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](#).

## Product Details

- 1X–3X and 2X–8X Variable Magnification
- Non-Rotating Lenses Minimize Beam Wander
- Compact Galilean Designs with Fixed Housing Length
- **TECHSPEC® Draconis® Broadband Beam Expanders** Also Available

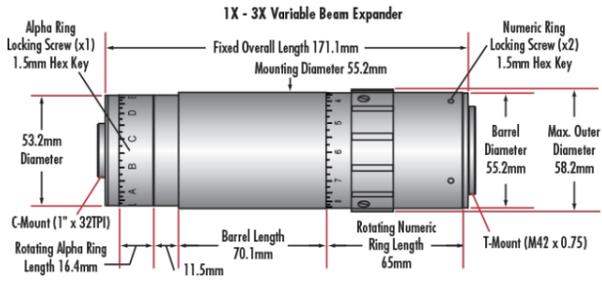
TECHSPEC® Research-Grade Variable Beam Expanders (RVBX) are ideal for high power laser applications where magnification changes may be required, such as prototyping or R&D. TECHSPEC Research-Grade Variable Beam Expanders feature  $\lambda/4$  transmitted wavefront, Galilean designs, and high laser damage 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 OEM implementation. Please contact our [Sales Department](#) for custom magnification requirements.

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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

## 2X - 8X Variable Beam Expander

