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TECHSPEC® 532nm 1X - 3X Research-Grade Variable Beam Expander

532nm 1X - 3X, #87-561

Stock **#87-561** **5 In Stock**

− 1 +   **£1,204**.00

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Volume Pricing	
Qty 1-4	**£1,204.00** each
Qty 5-24	**£1,060.00** each
Qty 25-99	**£944.00** each
Need More?	**Request Quote**

ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:	
Beam Expander	
Style:	
Variable Magnification	

Physical & Mechanical Properties

Length (mm):	

171.10

Weight (g):	
556	

Housing Diameter (mm):	
58.2	

Optical Properties

Entrance Aperture (mm):	
10	

Exit Aperture (mm):	
30	

Expansion Power:	
1X - 3X	

Substrate: ⬚	
Fused Silica (Corning 7980)	

Transmission (%):	
>97.5 @ DWL	

Angle of Incidence (°):	
0 ±0.06	

Coating:	
Laser V-Coat (532nm)	

Design Wavelength DWL (nm):	
532	

Transmitted Wavefront, P-V:	
<λ/4 @ 532nm for Input Beam ≤5mm	

Wavelength Range (nm):	
510 - 555	

Coating Specification:	
R_{abs} <0.25% @ 531 - 533nm R_{avg} <0.5% @ 510 - 555nm	

Damage Threshold, By Design: ⬚	
5 J/cm^2 @ 10ns, 20 Hz, 532nm	

Divergence Adjustment:	
Non-Rotating Optics	

Damage Threshold, Pulsed:	
5 J/cm^2 @ 532nm, 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:	
Compliant	

| Certificate of Conformance:	
View	

Reach 247:	
Compliant	

Product Details

For optimal performance, center the laser beam to the entrance lens and ensure that the beam is parallel to the beam expander's optical axis.

- 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 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 OEM implementation. Please contact our Sales Department for custom magnification requirements.

Technical Information

1X - 3X Variable Beam Expander
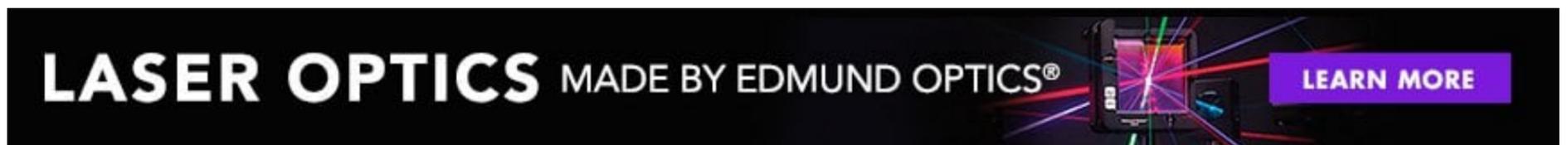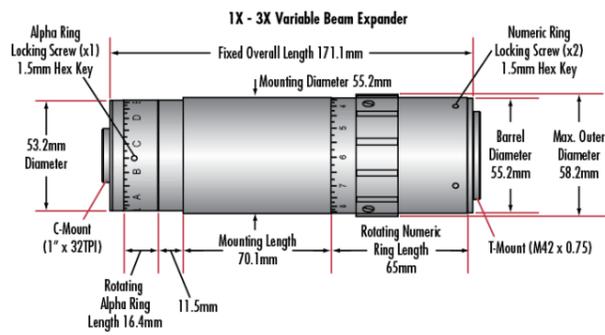
Design Wavelength	Stock No.	Fixed Overall Length A (mm)	Mounting Length E (mm)	Rotating Numeric Ring Length F (mm)	Rotating Alpha Ring Length G (mm)
355nm	#87-566	169.7	35.9	90.7	19.4
532nm	#87-567	169.3	31.5	70.4	43.7
Broadband VIS (633nm)	#87-569	169.3	31.5	70.4	43.7
Broadband NIR (785nm)	#87-570	169.3	31.5	70.4	43.7
1064nm	#87-568	169.3	31.5	70.4	43.7

2X - 8X Variable Beam Expander
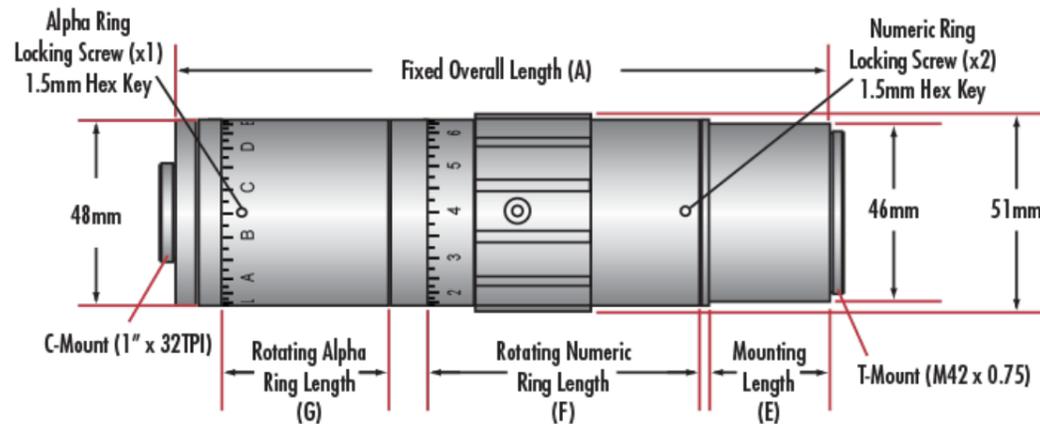
Custom

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.**

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