

TECHSPEC® 4.22X Magnification, NIR I Coated, Mounted Anamorphic Prism Pair



#47-274 4.22X Magnification, NIR I Coated, Mounted Anamorphic Prism Pair

Stock **#47-274 1 In Stock**

⊖ 1 ⊕ £416⁰⁰

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Volume Pricing	
Qty 1-5	£416.00 each
Qty 6-25	£375.20 each
Qty 26-49	£333.60 each
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Beam Shaping **Type:**

Physical & Mechanical Properties

+0.00/-0.10 **Dimensional Tolerance (mm):**

Optical Properties

Coating: NIR I (600-1050nm)

Design Wavelength DWL (nm): 830

Substrate: N-SF11

Magnification: 4.22X

Surface Quality: 20-10

Angle Tolerance (arcmin): 3

Coating Specification: $R_{avg} \leq 0.5\%$ @ 600 - 1050nm

Damage Threshold, By Design:
7 J/cm² @ 1064nm, 10ns

Power (fringes) @ 632.8nm: 3.00

Irregularity (fringes) @ 632.8nm: 1.00

Threading & Mounting

Mount: Mounted (Fixed Magnification)

Regulatory Compliance

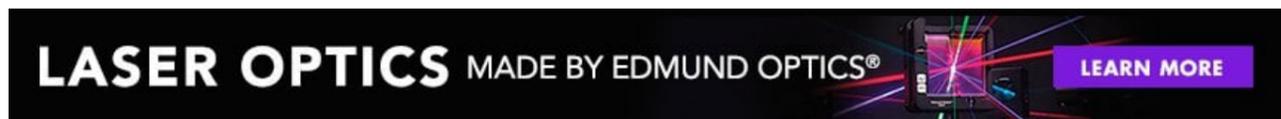
Certificate of Conformance: [View](#)

Product Details

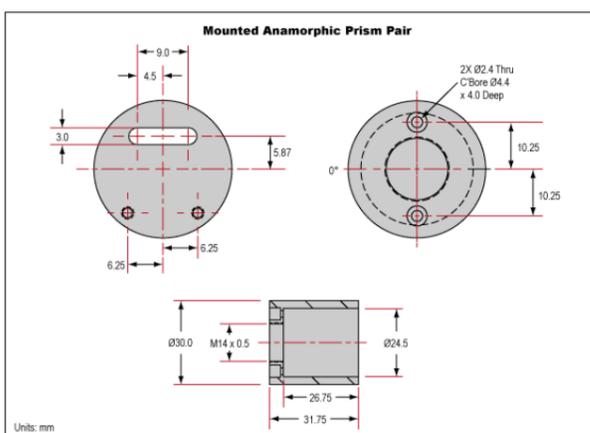
- Converts Elliptical Beam to Circular
- Anti-Reflection Coated for Common Diode Wavelengths
- Mounted and Unmounted Versions Available

An anamorphic prism pair is used to expand a laser beam in one dimension. This makes it ideal for converting the elliptical beam shape of laser diodes into a nearly circular one. Mounting our unmounted anamorphic prism pair in the proper orientation will provide magnification ratios from 2:1 - 6:1. Designed at 650nm and broadband anti-reflection (BBAR) coated for 600 – 1050nm, it provides excellent performance at both 635nm and 670nm.

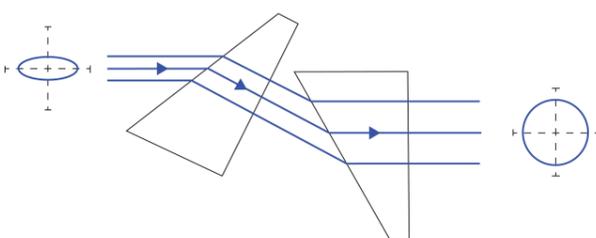
The center of the output beam is displaced 5.9mm from center of the input beam in our mounted anamorphic prism pair. The Dovetail Accessory Mount allows it to rotate with respect to the laser, simplifying bench-top mounting. The C-Accessory Mount allows our full line of [C-Mount components](#) to be used in conjunction with the mounted anamorphic prism pair.



Technical Information



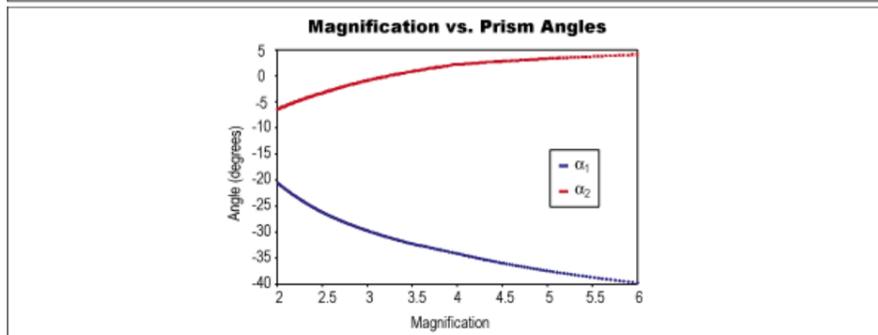
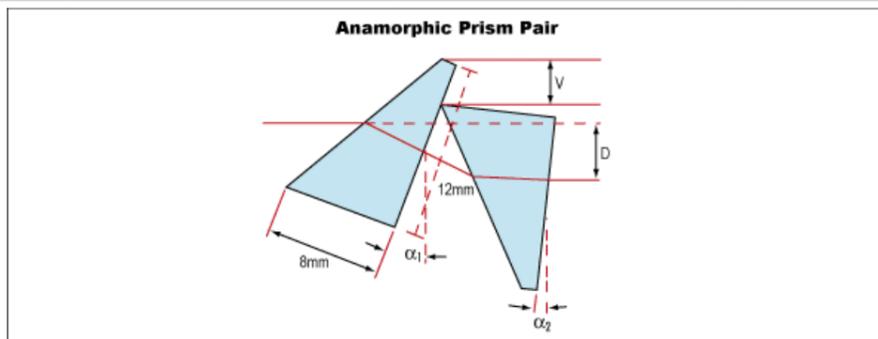
Mounted Anamorphic Prism Pair (Fixed Magnification)



Ray path for anamorphic prism pairs, showing transformation of elliptical beam to circular beam

Typical Values				
Magnification	$\alpha 1$	$\alpha 2$	Vertical Separation (V)	Beam Displacement (D)

2X	-20.6°	-6.5°	1.75mm	4.50mm
3X	-29.7°	-0.9°	2.56mm	5.45mm
4X	-34.1°	2.1°	3.01mm	5.74mm
5X	-37.4°	3.2°	3.33mm	6.15mm
6X	-39.7°	4.0°	3.51mm	6.42mm



Beam Expander Mounting Configurations.

Click on an item below to be brought to that item's product page.

