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TECHSPEC<sup>®</sup> 40mm Dia. x 100mm FL, YAG-BBAR Coated, Achromatic Lens



YAG-BBAR Coated Achromatic Lenses



Stock **#19-420** 20+ In Stock

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-

1

+

€192<sup>00</sup>

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| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €192,00 each                  |
| Qty 6-25       | €154,00 each                  |
| Qty 26-49      | €144,00 each                  |
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ⓘ Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Achromatic Lens

Type:

Physical & Mechanical Properties

|                      |                             |
|----------------------|-----------------------------|
| 40.00 +0.0/-0.025    | Diameter (mm):              |
| 39.00                | Clear Aperture CA (mm):     |
| <1                   | Centering (arcmin):         |
| 13.00 ±0.20          | Center Thickness CT (mm):   |
| 10.00 ±0.10          | Center Thickness CT 1 (mm): |
| 3.00 ±0.10           | Center Thickness CT 2 (mm): |
| 7.92                 | Edge Thickness ET (mm):     |
| Protective as needed | Bevel:                      |

|                                                                                                              |                                             |
|--------------------------------------------------------------------------------------------------------------|---------------------------------------------|
| Optical Properties                                                                                           |                                             |
| 100.00                                                                                                       | Effective Focal Length EFL (mm):            |
| ±1                                                                                                           | Focal Length Tolerance (%):                 |
| 91.24                                                                                                        | Back Focal Length BFL (mm):                 |
| 587.6                                                                                                        | Focal Length Specification Wavelength (nm): |
| 46.73                                                                                                        | Radius R <sub>1</sub> (mm):                 |
| -50.61                                                                                                       | Radius R <sub>2</sub> (mm):                 |
| -341.70                                                                                                      | Radius R <sub>3</sub> (mm):                 |
| N-BK7 / N-SF5                                                                                                | Substrate: □                                |
| 40-20                                                                                                        | Surface Quality:                            |
| 2.5                                                                                                          | f/#:                                        |
| 0.20                                                                                                         | Numerical Aperture NA:                      |
| YAG-BBAR (500-1100nm)                                                                                        | Coating:                                    |
| R <sub>abs</sub> <0.25% @ 532nm<br>R <sub>abs</sub> <0.25% @ 1064nm<br>R <sub>avg</sub> <1.0% @ 500 - 1100nm | Coating Specification:                      |
| 1.5λ                                                                                                         | Power (P-V) @ 632.8nm:                      |
| λ/4                                                                                                          | Irregularity (P-V) @ 632.8nm:               |
| 500 - 1100                                                                                                   | Wavelength Range (nm):                      |

|                       |                             |
|-----------------------|-----------------------------|
| Regulatory Compliance |                             |
| View                  | Certificate of Conformance: |

## Product Details

- Optimized for <0.25% Absolute Reflectivity at 532nm and 1064nm
- Excellent Broadband Transmission from 500 - 1100nm
- Low Cost Alternative to Air-Spaced Focusing Doublets

TECHSPEC® YAG-BBAR Coated Achromatic Lenses consist of two optical components cemented together to form a doublet that is ideal for correcting on-axis spherical and chromatic aberrations. These achromats feature a broadband anti-reflective coating with superior transmission from 500 - 1100nm, and are optimized for less than 0.25% absolute reflectivity at 532 and 1064nm. Our TECHSPEC® YAG-BBAR Coated Achromatic Lenses are specifically designed to minimize the spot size for polychromatic illumination within the recommended usable wavelength range, but may also be used for focusing Nd:YAG lasers, especially those with an alignment beam.

LASER OPTICS

MADE BY EDMUND OPTICS®



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## Technical Information



## 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](#).

## Compatible Mounts