

[See all 3 Products in Family](#)

TECHSPEC® 80mm EFL, Nd:YAG Air-Spaced Focusing Doublet



Stock #12-163 [CONTACT US](#)

- 1 + A\$1,128⁰⁰

ADD TO CART

Volume Pricing	
Qty 1-5	A\$1,128.00 each
Qty 6-25	A\$992.00 each
Qty 26+	A\$888.00 each
Need More?	Request Quote

Product Downloads

General

Focusing Achromat **Type:**

Physical & Mechanical Properties

27.0 **Clear Aperture CA (mm):**

1.0 **Center Air Spacing (mm):**

Housing Diameter (mm):
36 ±0.25

Housing Length (mm):
16.1 ±0.2

Construction:
Anodized Aluminum Housing

Optical Properties

Effective Focal Length EFL (mm):
80.00 @ 1064nm

Substrate:
[N-SK5 / N-SF57](#)

Surface Quality:
20-10

f#:
3.0

Coating:
Dual V-Coat (632.8 and 1064nm)

Coating Specification:
R_{abs} <0.5% @ 1030 - 1090nm
R_{abs} <1.0% @ 632.8nm

Design Wavelength DWL (nm):
632.8, 1064

Transmission (%):
≥99

Working Distance (mm):
70.88

Transmitted Wavefront Error, RMS:
λ/4 On central 18mm

Damage Threshold, By Design:
≥10 J/cm² @ 1064nm, 20Hz, 10ns (typical)

Threading & Mounting

Mounting Threads:
Input: M34 x 0.75
Output: M34 x 0.75

Regulatory Compliance

Certificate of Conformance:
[View](#)

Product Details

- Color Corrected at 632.8nm and 1064nm
- Optimized to Reduce Spherical Aberration
- Minimizes Spot Size for Materials Processing

TECHSPEC® Nd:YAG Air-Spaced Achromatic Focusing Doublets achieve diffraction limited performance at 1064nm. These lenses are designed for use with high power Nd:YAG laser systems utilizing a HeNe laser for alignment and also for laser welding and processing of aluminum, steel, and plastics. Filling the performance gap between more economical single element spherical lenses with worse performance and aspheres with diffraction limited performance, these lenses provide achromatic performance that single lens element solutions cannot. TECHSPEC® Nd:YAG Air-Spaced Achromatic Focusing Doublets are ideal in aluminum, plastic, and other material laser processing applications.

Technical Information

