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12.7mm Dia. x 12.7mm FL, Uncoated, ISP Optics Barium Fluoride (BaF₂) DCX Lens | BF-BX-12-12

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Stock #24-733 **CLEARANCE** 4 In Stock

− 1 + \$714.⁰⁰

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Qty 1-9	\$714.00 each
Qty 10+	\$642.60 each
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General

Type:
Double-Convex Lens

Model Number:
BF-BX-12-12

Physical & Mechanical Properties

12.70 +0.00/-0.13 **Diameter (mm):**

<3 **Centering (arcmin):**

Protective as needed **Bevel:**

5.80 ±0.20 **Center Thickness CT (mm):**

1.50 **Edge Thickness ET (mm):**

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

Optical Properties

12.70 @5μm **Effective Focal Length EFL (mm):**

Uncoated **Coating:**

[Barium Fluoride \(BaF₂\)](#) **Substrate:** □

60-40 **Surface Quality:**

λ **Irregularity (P-V) @ 632.8nm:**

10.47 **Radius R₁ (mm):**

10.471 **Radius R₂ (mm):**

1.00 **f/#:**

±2 **Focal Length Tolerance (%):**

0.50 **Numerical Aperture NA:**

200 - 12000 **Wavelength Range (nm):**

Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[View](#) **Certificate of Conformance:**

[Compliant](#) **Reach 240:**

Product Details

- Excellent Transmission from 0.2 - 12μm
- Provide High Transmission without AR Coatings
- Ideal for Infrared Spectroscopy and Infrared Imaging Applications

ISP Optics Barium Fluoride (BaF₂) Double-Convex (DCX) Lenses are ideal for infrared spectroscopy and infrared imaging applications requiring high transmission from 0.2 – 12μm. Barium Fluoride features a low index of refraction, enabling excellent transmission from the Vacuum-UV (VUV) to the Long-Wave Infrared (LWR) without the need for Anti-Reflection (AR) coatings. These lenses also provide higher resistance to high-energy radiation than Calcium Fluoride, even though they have similar physical properties. ISP Optics Barium Fluoride (BaF₂) Double-Convex (DCX) Lenses can be used up to 800°C in a dry environment, but prolonged exposure to moisture can degrade transmission in the ultraviolet range.

Note: These lenses are very sensitive to thermal shock.

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our [Optics Cleaning Resources](#) for step-by-step guides and best practices. For personalized assistance, [Email us](#) or [Chat](#) with our technical support team.



Component Handling Tools

