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12.7mm Dia. x 12.7mm FL, Uncoated, ISP Optics Barium Fluoride (BaF>sub>2) DCX Lens | BF-BX-12-12

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

- 1 + **S$714**.00

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Volume Pricing	
Qty 1-9	**S$714.00** each
Qty 10+	**S$642.60** each
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General

Type:
Double-Convex Lens

Model Number:
BF-BX-12-12

Physical & Mechanical Properties

Diameter (mm):
12.70 +0.00/-0.13

Centering (arcmin):
<3

Bevel:
Protective as needed

Center Thickness CT (mm):
5.80 ±0.20

Edge Thickness ET (mm):
1.50

Clear Aperture CA (mm):
11.43

Optical Properties

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

Coating:
Uncoated

Substrate:
Barium Fluoride (BaF_2)

Surface Quality:
60-40

Irregularity (P-V) @ 632.8nm:
λ

Radius R_1 (mm):
10.47

Radius R_2 (mm):
10.471

f/#:
1.00

Focal Length Tolerance (%):
±2

Numerical Aperture NA:
0.50

Wavelength Range (nm):
200 - 12000

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 240:
Compliant

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 (BaF_2) 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 (LWIR) 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 (BaF_2) 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

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