

UV-MIR Axicon

Series 612-A2



Features:

Ultra broadband transmission
Bessel beam formation
Long depth of focus

Applications:

Laser drilling/Machining
Optical trapping
Data transmission
Multiphoton Telescopes

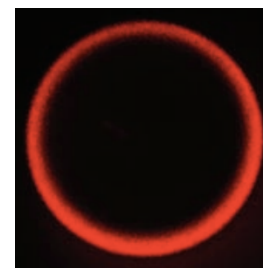


Product Description:

Precision polished Axicons made from calcium-fluoride (CaF_2) enable ultra-broadband operation. These optics are $\text{Ø}1''$ (25.4 mm) and are easily integrated into existing optical systems. The high-quality surface makes them ideally suited for high-power laser applications. Axicons are useful for converting Gaussian beam profiles into a non-diffracting “ring-shaped” Bessel beam profile, which is very useful in highly scattering media such as turbid air and biological samples. Bessel beams also have an extended depth of focus which is ideal for machining. Use two axicons together to form a collimated Bessel beam.

Specifications:

Operation Wavelengths	240 nm- 8.0 μm
Surface Quality	60-40 Scratch-Dig
Clear Aperture	>90% of Diameter
Angle Tolerance	± 0.01 deg.
Edge Thickness	3.9 mm
Thickness Tolerance	+0.1/ -0.0 mm



Ring-shaped Bessel beam after Axicon

Mechanical Drawing

612-A2

