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KO | BRINGING QUALITY INTO FOCUS

Fresnel Lenses for Magnification Displays

Knight Optical can offer you <u>Stock and Custom Fresnel Lenses</u>, for use within <u>Magnification Displays</u> in a range of materials such as PMMA Acrylic and Borosilicate.

We supply a range of Fresnel Lenses for a range of applications. All individually QA checked and metrology tested for quality to ensure parts meet customer specification. Supplied in a range of sizes and shapes with custom coatings tailored to meet your individual applications.

Our Fresnel Lenses consist of a flat surface with interspace concentric steps whereby each step corresponds to the surface of a conventional lenses. PMMA Acrylic is a preferred material type of the Magnification Displays as it is very lightweight when used in a large size. Fresnel lenses is a common focal length equivalent to a traditional lens, but with a fraction of the thickness. Additionally, because the lens is so thin little light is lost by absorption.

This stock range of fresnel lenses range from 5mm to 650mm aperture and contains both standard and precision ranges of fresnel lenses. The precision range has tighter tolerances with improved surface quality. These ranges are uncoated however antireflective coatings can be applied at short notice.

Typical specs:

Material: PMMA Acrylic/ Borosilicate

Center thickness: +/- 0.2mm
Clear aperture: Nominal

Focal length:

Standard range ± 5%

Precision range ± 2% typically (± 5% manufacturing data)

Design condition: Parallel light on grooved side

All our Fresnel Lenses are fully inspected on their quality in our ISO 9001 certified, state-of-the-art Metrology laboratory, using our and Starrett AV300 video microscope for high accurate diameter testing. This allows us to work to the highest <u>QA standards</u> and meet the tolerance specifications on these **precision components**.

Contact our technical sales team to discover how Knight Optical's high quality Fresnel Lenses and superior service can improve your instrumentation and supply chain experience.

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- View our QA and metrology information
- Watch our Corporate Video
- View Our Corporate Brochure
- Request a catalogue