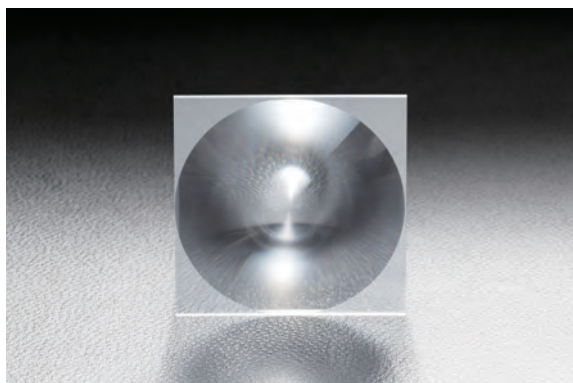


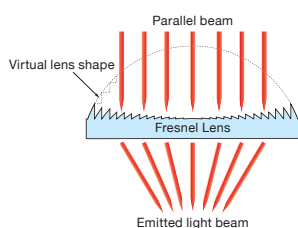
The lens of short focal length, which is thicker, has been made to a step structure and to a thin plate shape with the characteristics of the lens.

It can be used as a substitute for the lens for a loupe and LED light.

- Since it is processed directly on the acrylic plate of 2mm thickness, it is difficult to be deformed and the performance is stable.
- There are four focal lengths offered from 5mm to 20mm.
- Compared with the lens of the same focal length, it is lighter and lens will not protrude from the edge of holder.

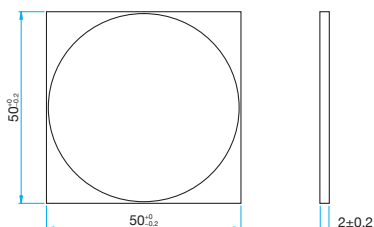


Schematic



Outline Drawing

(in mm)



Specifications

Material	Acrylic CLAREX
Refractive Index	n=1.49
Focal Length Tolerance	±10% of focal length (in a clear aperture)

* CLAREX is a registered trademark of Nitto Jushi Kogyo Co., Ltd..

Guide

- ▶ This product is available with different focal lengths and sizes that are not listed on-line or in our catalog. Please contact our Sales Team with your requests.

Attention

- ▶ There is a direction to the Fresnel lens. Surface that is processed is equivalent to convex.
- ▶ When used in laser, since diffracted light is generated in the step structure, some of the light will also leaked around the focused spot.
- ▶ Characteristics as the lens is obtained in the range of $\phi 50\text{mm}$, but it is not guaranteed the accuracy of the focal length out of the scope of the clear aperture.
- ▶ When rubbing strongly the processed surface of the fresnel lens, performance may be degraded. Please do not touch directly the surface.
- ▶ When exposed to high temperature of 80°C or more, it may be deformed and performance can be severely degraded.
- ▶ Please do not use organic solvents such as acetone and chloroform which will dissolved and damage the step structure.
- ▶ At the time of delivery, it is delivered with a protection sheet affixed to the surface. Please remove this protective sheet before using.

Specifications

Part Number	Focal length [mm]	Prism pitch [mm]	Clear Aperture [mm]
FRL-50S-05P	5	0.05	$\phi 10$
FRL-50S-10P	10	0.05	$\phi 20$
FRL-50S-15P	15	0.05	$\phi 30$
FRL-50S-20P	20	0.08	$\phi 40$

Application
Systems

Optics &
Optical
Coatings

Opto-
Mechanics

Bases

Manual
Stages

Actuators &
Adjusters

MotORIZED
Stages

Light Sources &
Laser Safety

Index

Guide

Mirrors

Beamsplitters

Polarizers

Lenses

Multi-Element Optics

Filters

Prisms

Substrates/Windows

Optical Data

Maintenance

Selection Guide

Plano Convex
Lenses
Plano Concave
Lenses

Biconvex Lenses

Biconcave Lenses

Kit

Reasonable Lens

Cylindrical

Others