



Specifications

Materials	N-BK7, UVFS
Diameter	10, 12.7, 20, 25.4, 50.8 mm (others on request)
Diameter tolerance	+0/-0.1 mm
Thickness tolerance	+/-0.1 mm
Apex angle (b)	90° - 178°
Angle tolerance	+/- 30"
Clear aperture	> 90 %
Surface quality	60/40 scratch/dig
Coatings	AR, Al, Ag (specified by customer)
Damage threshold (at 1064 nm)	a) 350 MW / cm ² b) 500 MW / cm ² c) 1 GW / cm ²

General

- Generating a non-diverging laser ring
- Create a Bessel-like beam intensity distribution

An axicon consists of a plano and a conical surface. This geometry focuses the incoming laser beam to an area with nearly constant intensity distribution along the optical axis. After passing the axicon, the beam becomes a Bessel beam-like ring with constant thickness $D/2$, independent on the projection distance.

Typical applications

- Laser material processing
- Optical tweezers / optical trapping
- Laser eye surgery
- Telescopes

Standard components

For any customized specification, please contact us.

Number	Diameter (mm)	Apex angle (°)
PL.AX.D25.A1	25.4	178
PL.AX.D25.A10	25.4	160
PL.AX.D25.A20	25.4	140
PL.AX.D25.A45	25.4	90

