

Axicons



Asphericon Precision Polished Axicon Specifications

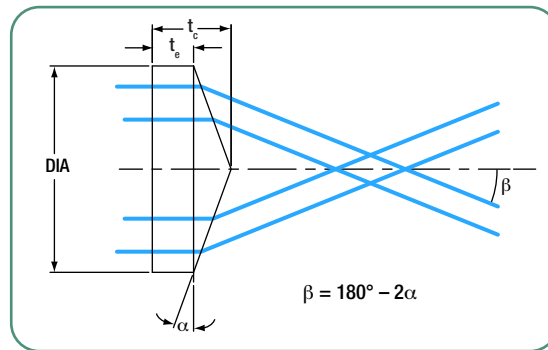
- **Material:** Fused Silica
- **Diameter:** 25.4 +0.0/-0.1 mm
- **Edge Thickness:** 5 mm
- **Thickness Tolerance:** +0.1/-0.0 mm
- **Angle Tolerance:** ±0.01°
- **Clear Aperture:** >90% of Diameter
- **Surface Quality:** 40-20 Scratch-Dig

Applications

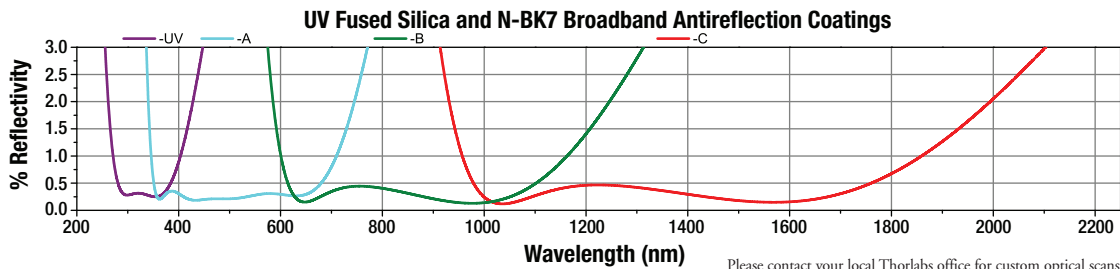
- Laser Drilling/Optical Trepanning
- Optical Trapping
- Optical Coherence Tomography
- Corneal Surgery
- Telescopes

Axicons, also known as conical lenses, are optical elements that have a conical surface on one side and a plano (flat) surface on the other. These optics are useful for imaging a point source into a line along the optical axis creating an infinite focus or transforming a collimated beam into a ring. They also change Gaussian beams into nondiffracting beams with a Bessel intensity profile. Our stocked Axicons have an AR coating; however, axicons with a reflective coating are available upon request. Please contact Tech Support for details.

Thorlabs now stocks precision polished Axicons from Asphericon. These optics are all Ø25.4 mm (Ø1") with base angles ranging from 0.5° to 20°. Four coating ranges are available for 290 to 370 nm, 350 to 700 nm, 650 to 1050 nm, or 1050 to 1620 nm. The Axicons are made from high-quality Fused Silica using computer numerical controlled (CNC) grinding and polishing machines. This provides a high-quality surface, making them ideally suited for high-power laser applications.



AR Coatings



Ø25.4 mm (Ø1") Precision Polished Axicons

ITEM# (350-700 nm)	ITEM# (650-1050 nm)	ITEM# (1050-1620 nm)	ITEM# (290-370 nm)	ANGLE (α)	t _c ** (mm)	PRICE			
						\$	£	€	RMB
AX2505-A*	AX2505-B*	AX2505-C*	AX2505-UV*	0.5°	5.1	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00
AX251-A*	AX251-B*	AX251-C*	AX251-UV*	1.0°	5.2	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00
AX252-A*	AX252-B*	AX252-C*	AX252-UV*	2.0°	5.4	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00
AX255-A*	AX255-B*	AX255-C*	AX255-UV*	5.0°	6.1	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00
AX2510-A*	AX2510-B*	AX2510-C*	AX2510-UV*	10.0°	7.2	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00
AX2520-A*	AX2520-B*	AX2520-C*	AX2520-UV*	20.0°	9.6	\$ 1,392.20	£ 965.10	€ 1,236.00	¥ 11,756.00

*These items are not offered uncoated.

**Center Thickness