

a|Axicons

asphericon's exclusive selection of 1" and 2" axicons have a superior surface roughness and can be used for high performance UV-applications. Available with 15 standard coatings and also as mounted axicons.

Key Benefits:

- = Outstanding surface form deviation of RMSi < 0.07 μm
- = Laser induced damage threshold: 12 J/cm², 100 Hz, 6 ns, 532 nm
- = Off-the-shelf delivery
- = RoHS compliance



Unmounted Axicon

AR-Coatings¹:

- A: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 400-600 nm, AOI=0°
- B: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 600-1050 nm, AOI=0°
- C: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 1000-1500 nm, AOI=0°
- E: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 1500-1900 nm, AOI=0°
- F: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 1900-2100 nm, AOI=0°
- X: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 240-380 nm, AOI=0°
- Y: R_{MAX} < 1.0%, R_{AVG} ≤ 0.4%, 320-450 nm, AOI=0°

AR-HighPower-Coatings:

- K: R < 0.25%, 355 nm, AOI=0°
- L: R < 0.25%, 532 nm, AOI=0°
- M: R < 0.25%, 1064 nm, AOI=0°
- N: R < 0.25%, 266 nm, AOI=0°
- O: R < 0.25%, 632 nm, AOI=0°
- P: R < 0.25%, 780 nm, AOI=0°
- Q: R < 0.25%, 1550 nm, AOI=0°
- R: R < 0.25%, 2000 nm, AOI=0°



Mounted Axicon

Lens description

Surface Form Deviation (RMS) ²	[μm]	0.07
Surface Imperfections	[Scratch/Dig]	40 - 20
Diameter Tolerance	[mm]	+0/-0.1
Center Thickness Tolerance	[mm]	±0.1/-0
Clear Aperture	[%]	>90

Product Code	Ø	Angle	Edge Thickness	λ _{Design}	Material
	[mm]	[degree]	[mm]	[nm]	
XFL25-005 ⁴	25.4	0.5	5.0	780	Fused Silica
XFL25-010 ⁴	25.4	1.0	5.0	780	Fused Silica
XFL25-020 ⁴	25.4	2.0	5.0	780	Fused Silica
XFL25-050 ⁴	25.4	5.0	5.0	780	Fused Silica
XFL25-100 ⁴	25.4	10.0	5.0	780	Fused Silica
XFL25-200 ⁴	25.4	20.0	5.0	780	Fused Silica
XFL50-005 ⁵	50.8	0.5	8.0	780	Fused Silica
XFL50-010 ⁵	50.8	1.0	8.0	780	Fused Silica
XFL50-020 ⁵	50.8	2.0	8.0	780	Fused Silica
XFL50-050 ⁵	50.8	5.0	8.0	780	Fused Silica
XFL50-100 ⁵	50.8	10.0	8.0	780	Fused Silica
XFL50-200 ⁵	50.8	20.0	8.0	780	Fused Silica

1 Custom coatings on request. | 2 RMS, corresponds to ISO 10110-5 (surface form tolerances). | 3 Prices valid per piece. | 4 Conical tip, Clear Aperture 2.3 - 23 mm, smaller conical tips on request. | 5 Conical tip, Clear Aperture 4.6 - 46 mm, smaller conical tips on request. | General: Technical parameters and prices are subject to change without prior notice.

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