

UV FS Biconcave Lenses

Catalogue number UV FS	Diameter D, mm	Focal length F, mm	Centre thickness CT, mm	Edge thickness ET, mm	Radius, mm	Price, EUR
114-1104E	12.7	-12.7	3.7	6.7	-12.6	49
114-1108E	12.7	-25.0	2.8	4.0	-24.2	49
114-1110E	12.7	-30.0	3.0	4.0	-29.0	49
114-1114E	12.7	-50.0	2.6	3.2	-48.0	49
114-1118E	12.7	-75.0	2.7	3.1	-71.8	49
114-1122E	12.7	-100.0	2.8	3.0	-95.5	47
114-1204E	25.4	-25.0	5.3	12.0	-24.6	71
114-1205E	25.4	-30.0	3.0	7.5	-29.0	71
114-1208E	25.4	-50.0	2.6	6.0	-48.0	71
114-1212E	25.4	-75.0	3.8	6.1	-71.9	71
114-1216E	25.4	-100.0	3.6	5.3	-95.7	71
114-1220E	25.4	-150.0	4.4	5.3	-143.4	71
114-1224E	25.4	-200.0	3.0	3.8	-190.7	70

Please contact us for other size, focus or precision requirements.

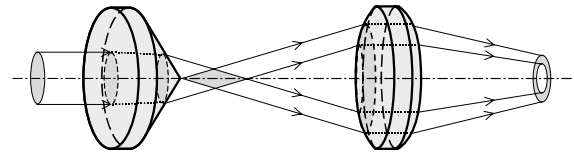
CONICAL LENSES (AXICONS)

- Precision and standard grade axicons
- Can be made from most optical materials
- Can be supplied with AR and BBAR coatings

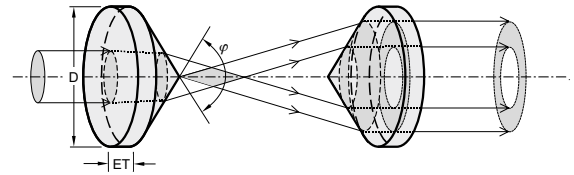
We can supply custom cutting, edging, coating or complete fabrication if required.

If you cannot find your axicons needed, please send your specification or drawings for a custom quotation.

An axicon with a spherical lens produces an annular focus.



Two axicons together produce a thick-walled hollow "pipe" of light.



Precision Grade Plano-Convex Axicons

SPECIFICATIONS

Material	UVFS
Surface quality	40-20 scratch & dig (MIL-PRF-13830B)
Clear aperture	90% of the diameter
Diameter tolerance	+0.00 -0.1 mm
Edge thickness	3.5 mm
Angle tolerance	±0.05° (±3 arcmin)
Surface irregularity	λ/4 @ 633 nm
Apex rounding	< Ø0.4 mm

Catalogue number	Diameter D, mm	Apex angle φ, deg	Edge thickness ET, mm	Centre thickness CT, mm	Price, EUR
131-1230	25.4	130	3.5	9.4	360
131-1240	25.4	140	3.5	8.1	360
131-1260	25.4	160	3.5	5.7	360
131-1265	25.4	165	3.5	5.2	360
131-1270	25.4	170	3.5	4.6	360
131-1275	25.4	175	3.5	4.1	360
131-1276	25.4	176	3.5	3.9	360
131-1277	25.4	177	3.5	3.8	360
131-1278	25.4	178	3.5	3.7	360
131-1279	25.4	179	3.5	3.6	360
131-1560	50.8	160	5	9.4	685
131-1570	50.8	170	5	7.2	685
131-1576	50.8	176	5	5.9	685
131-1578	50.8	178	5	5.4	685
131-1579	50.8	179	5	5.2	685

HOUSING ACCESSORIES

Universal Adjustable Lens/Optics Mount 830-0035

See page 7.28



Standard Plano-Convex Axicons

SPECIFICATIONS

Material	BK7, UV FS
Surface quality	60-40 scratch & dig (MIL-PRF-13830B)
Clear aperture	90% of the diameter
Diameter tolerance	+0.00 -0.12 mm
Angle tolerance	±0.5°
Surface irregularity	1 λ @ 633 nm

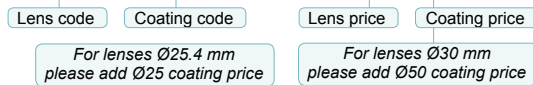
Catalogue number		Diameter D, mm	Apex angle φ, deg	Edge thickness ET, mm	Centre thickness CT, mm	Price, EUR BK7 / UV FS
BK7	UV FS					
130-0240	130-1240	25.4	140	8	12.6	160 / 283
130-0260	130-1260	25.4	160	8	10.2	160 / 283
130-0265	130-1265	25.4	165	8	9.7	160 / 283
130-0270	130-1270	25.4	170	8	9.1	160 / 283
130-0275	130-1275	25.4	175	8	8.6	160 / 283
130-0278	130-1278	25.4	178	8	8.2	160 / 283

Coated Lenses Ordering Information

Please choose relevant coating from anti-reflection coatings section (pages 1.5 - 1.6). The coating code and price should be added to the lens code and price.

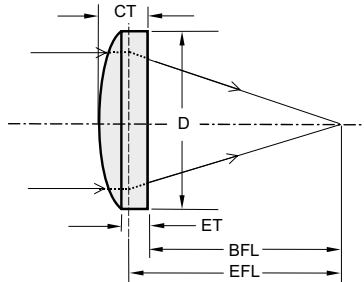
Example:

BK7 axicon Ø30 mm, apex 160°, coated AR/AR@400-700 nm, AOI=0°
Code: **130-0360 + ARB550**, Price: 197 + 67 EUR= 264 EUR/pc.



PRECISION ASPHERICAL LENSES

Aspherical lenses are designed to reduce spherical aberration. Complex multi-lens systems designed for compensation of spherical aberration can often be replaced with a single aspheric lens. We can produce aspherical lenses of custom design using your drawings or specifications in our CNC lens polishing facility.



SPECIFICATIONS

Standard material	N-BK7	[1.517]
[Refractive index]	S-LAH64	[1.788]
	UVFS	[1.453]
Design wavelength	780 nm	
Surface quality	40-20 scratch & dig (uncoated)	
Clear aperture	>90% of diameter	
Diameter tolerance	+0.0 -0.05 mm	
Bevel	0.3 mm max @ 45°	
Center thickness tolerance	≤0.05 mm	
EFL tolerance	≤0.1%	
Asphere figure error P-V	±1 μm	
Surface form deviation RMS	≤0.5 μm	

Catalogue number	Substrate	D, mm	EFL, mm	BFL, mm	CT, mm	CA, mm	NA	Price, EUR
116-1210	S-LAH64	12.5	10	7.6	4.3	11.3	0.544	130
115-1225	N-BK7	12.5	25	22.4	4.0	11.3	0.227	130
117-1240	UVFS	12.7	40	36.2	5.5	11.4	0.144	245
116-2520	S-LAH64	25	20	15.7	7.6	22.5	0.543	170
115-2550	N-BK7	25	50	46	6.0	22.5	0.232	170
115-2532	N-BK7	25	32	27.4	7.0	22.5	0.359	170
117-2530	UVFS	25.4	30	24.5	8.0	22.9	0.398	320
117-2540	UVFS	25.4	40	35.9	6.0	22.9	0.292	320
117-2550	UVFS	25.4	50	46.6	5.0	22.9	0.232	320
117-2560	UVFS	25.4	60	56.6	5.0	22.9	0.192	320
116-5040	S-LAH64	50	40	31.3	15.5	45.0	0.554	310
115-5100	N-BK7	50	100	93.4	10.0	45.0	0.237	310