



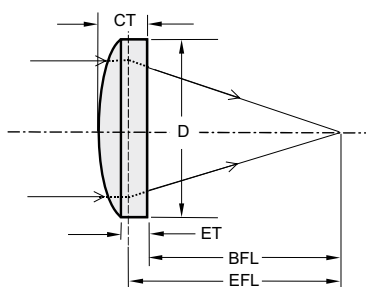
STANDARD PLANO-CONVEX AXICONS

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

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	$\pm 0.5^\circ$
Surface irregularity	S1 (conical): $\pm 2.5 \mu\text{m}$ S2 (flat): $\lambda @ 633 \text{ nm}$

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 [Refractive index]	N-BK7 [1.517] 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	$\leq 0.05 \text{ mm}$
EFL tolerance	$\leq 0.1\%$
Asphere figure error P-V	$\pm 1 \mu\text{m}$
Surface form deviation RMS	$\leq 0.5 \mu\text{m}$

Aspheric lenses with surface figure error P-V <0.6 μm are available on request.

Substrate	D, mm	EFL, mm	BFL, mm	CT, mm	CA, mm	NA	Catalogue number	Price, EUR
S-LAH64	12.5	10	7.6	4.3	11.3	0.544	116-1210	130
UVFS	12.7	20	17	4.4	11.4	0.275	117-1220	245
UVFS	12.7	25	22	3.8	11.4	0.223	117-1225	245
N-BK7	12.5	25	22.4	4.0	11.3	0.227	115-1225	130
UVFS	12.7	15	11.4	5.3	11.4	0.356	117-1215	245
UVFS	12.7	30	27.6	3.5	11.4	0.187	117-1230	245
UVFS	12.7	40	36.2	5.5	11.4	0.144	117-1240	245
S-LAH64	25	20	15.7	7.6	22.5	0.543	116-2520	170
N-BK7	25	50	46	6.0	22.5	0.232	115-2550	170
N-BK7	25	32	27.4	7.0	22.5	0.359	115-2532	170
UVFS	25.4	20	9.9	14.7	22.9	0.496	117-2520	320
UVFS	25.4	25	17.8	10.5	22.9	0.416	117-2525	320
UVFS	25.4	30	24.5	8.0	22.9	0.398	117-2530	320
UVFS	25.4	40	35.9	6.0	22.9	0.292	117-2540	320
UVFS	25.4	50	46.6	5.0	22.9	0.232	117-2550	320
UVFS	25.4	60	56.6	5.0	22.9	0.192	117-2560	320
S-LAH64	50	40	31.3	15.5	45.0	0.554	116-5040	310
N-BK7	50	100	93.4	10.0	45.0	0.237	115-5100	310
UVFS	50.8	50	37.0	18.9	45.7	0.416	117-5050	590
UVFS	50.8	60	49.5	15.2	45.7	0.356	117-5060	570
UVFS	50.8	75	66.7	12.1	45.7	0.292	117-5075	560
UVFS	50.8	100	93.6	9.4	45.7	0.223	117-5100	550

