

a|High-NA

Precision-polished aspheres especially suitable for demanding laser applications thanks to a superior surface quality. Also available as mounted lenses.

Key Benefits:

- = Outstanding surface form deviation of $RMS_s \leq 0.5 \mu\text{m}$
- = Decrease of chromatic aberrations by use of low dispersion material
- = Off-the-shelf delivery
- = RoHS compliance
- = Available with 3 standard coatings¹:
 - A: $R_{MAX} < 1.0\%$, $R_{AVG} \leq 0.4\%$, 400-600 nm, AOI=0°
 - B: $R_{MAX} < 1.0\%$, $R_{AVG} \leq 0.4\%$, 600-1050 nm, AOI=0°
 - C: $R_{MAX} < 1.0\%$, $R_{AVG} \leq 0.4\%$, 1000-1500 nm, AOI=0°



Unmounted Asphere

Lens description

Surface Form Deviation (RMS) ²	[μm]	≤ 0.1
EFL Tolerance	[%]	≤ 0.1
Surface Imperfections	[Scratch/Dig]	60 - 40
Diameter Tolerance	[mm]	+0/-0.05
Center Thickness Tolerance ³	[mm]	+0.05
Clear Aperture	[%]	≥ 90



Mounted Asphere

Precision

Product Code	\emptyset	EFL	NA	f/d	WD	λ_{Design}	Material	RMSi	Wavefront RMS
	[mm]	[mm]			[mm]	[nm]		[μm]	[nm]
AHL10-08 ⁴	10	8	0.55	0.80	6.0	780	S-LAH64	≤ 0.5	390
AHL12-10	12.5	10	0.55	0.80	7.6	780	S-LAH64	≤ 0.5	390
AHL15-12	15	12	0.55	0.80	9.0	780	S-LAH64	≤ 0.5	390
AHL18-15	18	15	0.53	0.83	11.5	780	S-LAH64	≤ 0.5	390
AHL20-18	20	18	0.49	0.90	14.0	780	S-LAH64	≤ 0.5	390
AHL25-20	25	20	0.54	0.80	15.7	780	S-LAH64	≤ 0.5	390
AHL30-26	30	26	0.52	0.87	20.6	780	S-LAH64	≤ 0.5	390
AHL45-32	45	32	0.61	0.71	24.2	780	S-LAH64	≤ 0.5	390
AHL50-40	50	40	0.55	0.80	31.3	780	S-LAH64	≤ 0.5	390

Ultra

Product Code	\emptyset	EFL	NA	f/d	WD	λ_{Design}	Material	RMSi	Wavefront RMS
	[mm]	[mm]			[mm]	[nm]		[μm]	[nm]
AHL10-08 ⁴	10	8	0.55	0.80	6.0	780	S-LAH64	≤ 0.1	78
AHL12-10	12.5	10	0.55	0.80	7.6	780	S-LAH64	≤ 0.1	78
AHL15-12	15	12	0.55	0.80	9.0	780	S-LAH64	≤ 0.1	78
AHL18-15	18	15	0.53	0.83	11.5	780	S-LAH64	≤ 0.1	78
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AHL25-20	25	20	0.54	0.80	15.7	780	S-LAH64	≤ 0.1	78
AHL30-26	30	26	0.52	0.87	20.6	780	S-LAH64	≤ 0.1	78
AHL45-32	45	32	0.61	0.71	24.2	780	S-LAH64	≤ 0.1	78
AHL50-40	50	40	0.55	0.80	31.3	780	S-LAH64	≤ 0.1	78

¹ Custom coatings available upon request. | ²RMS_s corresponds to ISO 10110-5 (surface form tolerances). | ³ For lenses AHL45-32, AHL50-40 please consider a center thickness tolerance of ± 0.1 . | ⁴ Calculated for 250 μm cover glass thickness. | General: Technical parameters and prices are subject to change without prior notice.

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