

Technologies

High-End Finishing

Dimensions [ISO 10110-1]		
Diameter	mm	6 - 300
Tolerance	mm	± 0.03
Center thickness	mm	< 60
Tolerance	mm	± 0.01
Surface form [ISO 10110-1; 12]		geometry dependent up to
Radius of curvature – local cc	mm	15
Clear aperture	% of Ø	90
Clear aperture surface slope	degree	75
Surface form tolerances (ISO 10110-5) and Aspheric surfaces (ISO 10110-12)		
<small>3/ A (B, C) RMSi < D; slope < F; slope integration length = G; spatial sampling resolution = H; see also ISO 14999-4</small>		
Tolerance of radius of curvature	%	± 0.02
Sagitta deviation – A (Power)	fringe/µm	0.30 / 0.08
Irregularity – B (PV)	fringe/µm	0.30 / 0.08
Rotational invariant irregularity – C	fringe/µm	0.20 / 0.05
RMS irregularity – RMSi – D	fringe/µm	0.10 / 0.03
Slope tolerance – F/G/H	arc sec/mm/mm	12 / 1 / 0.1
Centration [ISO 10110-6] 4/ σ (L)		
Edge thickness variation (defines tilt angle)	µm	5
Tilt angle of the aspheric surface to the second surface – σ	arc min	0.35
Lateral displacement of the aspheric to the edge of the lens – L	mm	0.01
Lateral displacement of the aspheric to the second surface – L	mm	0.01
Surface imperfections [ISO 10110-7; 5/ N x A; L N “ x A“]		
Dig – N x A		2 x 0.04
Scratches – L N “ x A“		L2 x 0.04
MIL – Scratch / Dig		20 – 10
Surface texture [ISO 10110-8]		
Surface roughness – Rq	nm	0.50
Measurement		
Full-surface interferometric measurement		guaranteed

