Precisometer

Spherical Lenses

Spherical lenses supplied with anti-reflection or high-reflection coatings on the surface. Substrates are optional, including N-BK7, UV fused silica, K9 and silicon. Plano-convex, double-convex, double-concave and plano-concave forms are available, and other lens types can be offered on request.

Standard product

Parameter	Value
Material	BK7 / K9 / Fused Silica
Design Wavelength	261-3000nm
Paraxial Focal Length	±2%
Centration	3 arc minutes
Clear Aperture	>80%
Bevel	0.25 mm x 45°
Surface Quality	20-10/ 40-20/ 60-40
Surface Figure	·/4@632.8nm

Lens types

Lens	Property and application
Plano-Convex Lens	Positive focus length. Suitable when one conjugate is more than five times the other. Also where both conjugates are on the same side of the lens. It is widely used for emitter, detector and laser.
Double-Convex Lens	Double-Convex lens are comprised of two convex spherical. Positive focus length. It is widely used for projection system, imaging system and laser measurement system.
Double-Concave Lens	Negative lens with the form suited to producing diverging light or a virtual image, where the input light is converging. It is widely used for laser expanding system.
Plano-Concave Lens	Negative lens with the form suitable where one conjugates is more than five times the other, e.g. producing divergent light from a collimated input beam. It is widely used for projection system, imaging system and laser measurement system.