

CRESCENT COMPONENTS AND SYSTEMS

OPTICS

Spherical Lenses

• Type: Convex, Concave

• Material: BK₇, Fused Silica, ZnSe

• Size: 6mm-100mm

• Focal Length: 10mm-1000mm • Dimension Tolerance: -0.1mm

Surface Figure: λ/4 @632nm
Surface Quality: 60/40

• AR Coating: Broadband, 98% Transmission

• Diameter, focal length and coatings for these lenses can be customised on demand



Achromatic Lenses

• Material: BK₇, Fused Silica

• Size: 6mm-50mm

Focal Length: 10mm-500mm
Dimension Tolerance: -0.1mm
Surface Figure: λ/4 @632nm

• Surface Quality: 60/40

AR Coating: Broadband, 98% Transmission
Diameter, focal length and coatings for these lenses can be customised on demand



Cylindrical Lenses

• Material: BK₇, Fused Silica

• Size: 25mm-50mm

Focal Length: 50mm-500mm
Dimension Tolerance: -0.1mm
Surface Figure: λ/4 @632nm

• Surface Quality: 60/40

• AR Coating: Broadband, 98% Transmission

• Diameter, focal length and coatings for these lenses can be customised on demand



Optical Windows

• Material: BK₇, Fused Silica, CaF₂, Sapphire

• Shape: Circular, Square, Rectangular

Size: 5mm-50mmClear Aperture: ≥85%

Dimension Tolerance: - 0.1mm
Thickness Tolerance: ±0.1mm

• Surface Flatness: λ /4 per 25mm @632nm

• Surface Quality: 60/40

• AR Coating: BB (450nm-750nm)

Customized size, material and coating available on demand



Flat Mirrors

• Material: BK₇, Fused Silica, Al

• Shape: Circular, Square, Rectangular

• Size: 12.5mm-50mm

• Dimension Tolerance: - 0.1mm

• Thickness Tolerance: ±0.1mm

• Surface Flatness: λ /4 per 25mm @632nm

• Surface Quality: 60/40

• Coating: Metal (Al, Silver), Dielectric

• Customized size, flatness and coating, available

on demand



Prisms

• Type: Right Angle, Equilateral, Penta, Dove, Cube Corner, Anamorphic

• Material: BK₇, Fused Silica

• Size: 5mm-50mm

• Dimension Tolerance: ±0.1mm

• Surface Flatness: λ /4 per 25mm @632nm

• Surface Quality: 60/40

• AR Coating: BB (450nm-750nm)

· Customized size and coating, available on demand



Interference Filters

• Type: Low Pass, High Pass, Band Pass

 Centre Wave length: 450nm, 532nm, 633nm, 808nm, 1064nm and 1550nm

• FWHM: 10nm, 20 nm.

• Material: BK₇

• Size: 12.5mm-25mm • Clear Aperture: ≥85%

• Dimension Tolerance: - 0.1mm

• Surface Flatness: $\lambda/4$ per 25mm @632nm

Surface Quality: 60/40
Parallelism: 30 arc-sec

 Customized centre wavelength and FWHM for Band pass filters, available on demand



Neutral Density Filters

• Type: Fixed, Variable Attenuation

• Material: BK₇

Size (Fixed Attenuation): 12.5mm-50mm
Size (Variable Attenuation): 25mm-100mm

• Clear Aperture: ≥85%

• Dimension Tolerance: - 0.1mm

• Optical Density: 1-4

• Surface Flatness: λ/4 per 25mm @632nm

• Parallelism: 30 arc-sec

Customized Attenuation (OD), available on demand



Cube Beam Splitters

• Type: Non-polarizing / Polarizing

• Material: BK₇, Fused Silica

Size: 5mm-50mm
 Split Ratio: 50:50 ±5%

• Surface Flatness: λ /4 per 25 mm @632nm

Surface Quality: 60/40Parallelism: 30 arc-sec

• Coating (Hypotenuse): Silver, Dielectric

 AR Coating: Broadband, on all four surfaces. Top and bottom surface grounded

Customized size & split ratio, available on demand

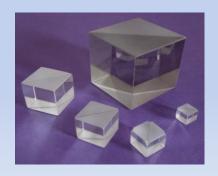


Plate Beam Splitters

• Material: BK₇, Fused Silica

• Size: 25mm-50mm

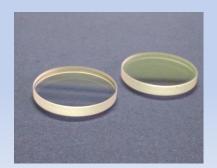
Split Ratio: 50:50 or 30:70Split Ratio Tolerance: ±5%

• Surface Flatness: λ /4 per 25 mm @632nm

Surface Quality: 60/40Parallelism: 30 arc-secCoating: Silver, Dielectric

• AR Coating: BB on both front and back surfaces

 Customized size of plate BS and their split ratio, available on demand



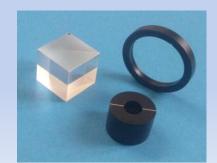
Polarisers

• Size: 12.5mm, 25mm

• Wavelength Range: 450nm-750nm

Polarisation: Linear
Extinction Ratio: 500:1
Polarisation Efficiency: 98%
Polarizer Sheet Thickness: 0.2mm
Sandwiching Material: BK₇

· Customized size, available on demand



Retardation Wave Plates

• Type: Quarter Wave / Half Wave

Material: QuartzSize: 12.5mm, 25mm

• Dimension Tolerance: - 0.1mm

• Surface Flatness: λ /4 per 25mm @632nm

• Surface Quality: 60/40

• Beam Deviation: 10 arc-sec

• Coating: AR Coating on both sides

Customized size and split ratio, available on demand

