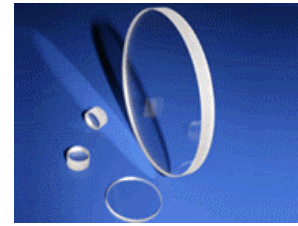


Windows are used to isolate different physical environments while allowing light to pass. When selecting windows you should consider materials, transmission, scattering, wavefront distortion, parallelism and resistance to certain environment.



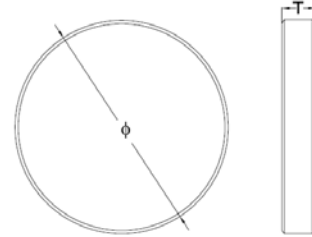
Main Applications of Windows

- Projection Optics Systems
- Imaging Optics Systems
- Optical Measurement Systems

Standard BK7 Windows

Key Features

- Transmission Range: 330-2100nm
- Refractive Index: 1.5164 @ 588nm
- Thermal Expansion Coefficient: $7.5 \times 10^{-6}K$



Specifications

Material	BK7 Grade A Optical Glass
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<1 arc minute
Surface Quality	60/40 Scratch and Dig
Wavefront Distortion	λ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	3.0	WNS1010
12.7	3.0	WNS1012
15.0	3.0	WNS1015
20.0	3.0	WNS1020
25.4	3.0	WNS1025
30.0	3.0	WNS1030
50.8	6.35	WNS1050

High Precision BK7 Windows

Specifications

Material	BK7 Grade A Optical Glass
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<10 arc seconds
Surface Quality	20/10 Scratch and Dig
Wavefront Distortion	$\lambda/10$ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	6.0	WNH1010
12.7	6.0	WNH1012
15.0	6.0	WNH1015
20.0	6.0	WNH1020
25.4	6.35	WNH1025
30.0	6.35	WNH1030
50.8	10.0	WNH1050

• Note

- Other sizes, thickness and coatings are also available upon request.

Windows are used to isolate different physical environments while allowing light to pass. When selecting windows you should consider materials, transmission, scattering, wavefront distortion, parallelism and resistance to certain environment.

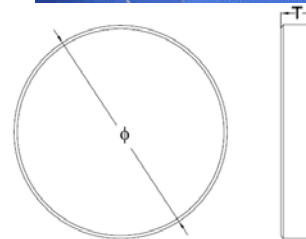
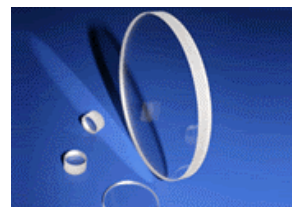
Main Applications of Windows

- Projection Optics Systems
- Imaging Optics Systems
- Optical Measurement Systems

Standard Fused Silica Windows (UVFS)

Key Features

- Transmission Range: 185-2500nm
- Refractive Index: 1.4858 @ 308nm
- Thermal Expansion Coefficient: $0.54 \times 10^{-6}K$



Specifications

Material	UV Grade Fused Silica
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<1 arc minute
Surface Quality	60/40 Scratch and Dig
Wavefront Distortion	λ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	3.0	WNS2010
12.7	3.0	WNS2012
15.0	3.0	WNS2015
25.4	3.0	WNS2025

High Precision Fused Silica Windows (UVFS)

Specifications

Material	UV Grade Fused Silica
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<10 arc seconds
Surface Quality	20/10 Scratch and Dig
Wavefront Distortion	$\lambda/10$ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	3.0	WNH2010
12.7	3.0	WNH2012
15.0	3.0	WNH2015
25.4	3.0	WNH2025

Note

- Other sizes, thickness and coatings are also available upon request.

Windows are used to isolate different physical environments while allowing light to pass. When selecting windows you should consider materials, transmission, scattering, wavefront distortion, parallelism and resistance to certain environment.

Main Applications of Windows

- Projection Optics Systems
- Imaging Optics Systems
- Optical Measurement Systems

Calcium Fluoride Windows (CaF₂)

Key Features

- Transmission Range: 170-7800nm
- Refractive Index: 1.399 @ 5000nm
- Thermal Expansion Coefficient: $18.85 \times 10^{-6}K$
- Little Hygroscopic Susceptibility

Specifications

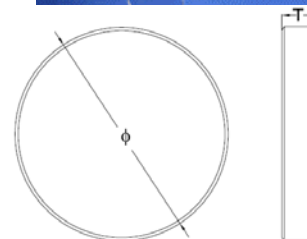
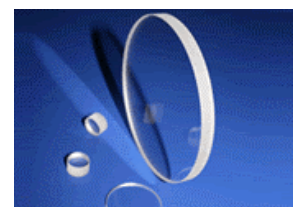
Material	Calcium Fluoride Single Crystal
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<1 arc minute
Surface Quality	80/50 Scratch and Dig
Wavefront Distortion	$\lambda/4$ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	2.0	WNS3010
12.7	2.0	WNS3012
15.0	2.0	WNS3015
20.0	2.0	WNS3020
25.4	3.0	WNS3025
30.0	3.0	WNS3030
50.8	5.0	WNS3050

Note

- Other sizes, thickness and coatings are also available upon request.



Windows are used to isolate different physical environments while allowing light to pass. When selecting windows you should consider materials, transmission, scattering, wavefront distortion, parallelism and resistance to certain environment.

Main Applications of Windows

- Projection Optics Systems
- Imaging Optics Systems
- Optical Measurement Systems

Magnesium Fluoride Windows (MgF₂)

Key Features

- Transmission Range: 130-7000nm
- Refractive Index: $n_o = 1.3836 @ 405nm$, $n_e = 1.3957 @ 405nm$
- Thermal Expansion Coefficient: $a=13.7 \times 10^{-6}K$; $b=8.48 \times 10^{-6}K$

Specifications

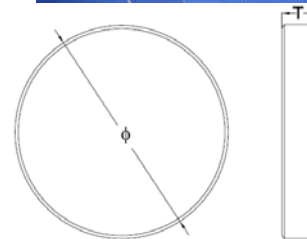
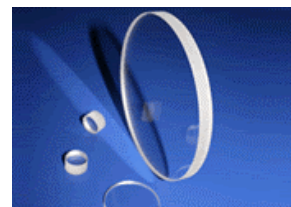
Material	Magnesium Fluoride Single Crystal
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<1 arc minute
Surface Quality	60/40 Scratch and Dig
Wavefront Distortion	$\lambda/4$ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
10.0	2.0	WNS4010
12.7	2.0	WNS4012
15.0	3.0	WNS4015
25.4	3.0	WNS4025

Note

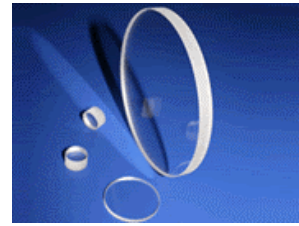
- Other sizes, thickness and coatings are also available upon request.



Windows are used to isolate different physical environments while allowing light to pass. When selecting windows you should consider materials, transmission, scattering, wavefront distortion, parallelism and resistance to certain environment.

Main Applications of Windows

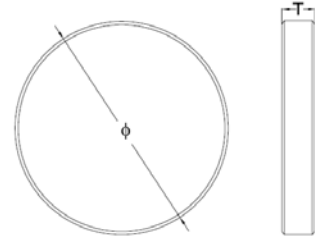
- Projection Optics Systems
- Imaging Optics Systems
- Optical Measurement Systems



Sapphire Windows (Al₂O₃)

Key Features

- Transmission Range: 180-4500nm
- Refractive Index: 1.755 @ 1000nm
- Thermal Expansion Coefficient: 8.4×10^{-6} K



Specifications

Material	Anisotropic Synthetic Sapphire Crystal
Dimension Tolerance	+ 0.0, - 0.1mm
Thickness Tolerance	±0.2mm
Clear Aperture	>80%
Parallelism	<3 arc minute
Surface Quality	80/50 Scratch and Dig
Wavefront Distortion	λ per 25mm @ 632.8nm
Bevel	0.25mm × 45°
Coating	Uncoated

Standard Products

Diameter Φ (mm)	Thickness (mm)	Part No.
8.0	0.5	WNS5008
12.7	1.0	WNS5012
20.0	2.0	WNS5020
25.4	2.0	WNS5025
38.0	5.0	WNS5038

Note

- Other sizes, thickness and coatings are also available upon request.

All statements, technical information and recommendations related to the products herein are based upon information believed to be reliable or accuracy or completeness thereof is not guaranteed, and no responsibility is assumed for any inaccuracies. The user assumes all risks and liability whatsoever in connection with the use of a product or its application, AOTK reserves the right to change at any time of a product offered for sale herein. AOTK makes no representations that the products herein are free from any intellectual property claims of others. Please contact AOTK for more information.