

Flat-parallel windows



Standard uncoated flat-parallel windows are fabricated from BK7 or UV grade fused silica optical glass. UV grade fused silica glass windows are a good option for UV, ultrashort pulse, and high-power laser applications due to their low sensitivity to temperature variations, relatively high damage threshold and UV transmission down to 185 nm.

BK7 glass windows are a cost-effective choice for visible and near-infrared range, low/mid-power laser and non-laser applications. These components are initially uncoated and demand metallic or dielectric coatings for a particular application. 4Lasers provide coating service upon request. Contact us for custom solutions and pricing.

Main features

- Fabricated from high-quality UV grade fused silica, BK7 glasses
- Optically polished surfaces
- Available in round or rectangular shape with various thicknesses
- Custom coated and uncoated windows are available upon request

Application examples

- Substrates of mirrors and beamsplitters
- Isolation of different physical environments
- Beam sampling

Standard specifications

FLAT-PARALLEL WINDOWS	
Substrate material	BK7, UVFS
Wavelength range	Uncoated BK7 windows: 350 nm - 2 μm Uncoated UVFS windows: 185 nm - 2,1 μm
Clear aperture	>85%
Face dimensions tolerance	+0/-0,15 mm
Thickness tolerance	±0,25 mm
Parallelism error	<30 arcsec
Protective chamfers	≤ø50,8 mm: <0,35 mm at 45° >ø50,8 mm: <0,50 mm at 45°
Surface quality	≤ø25,4 mm: 10-5 S-D >ø25,4 mm: 20-10 S-D
Transmitted wavefront distortion	≤ø25,4 mm: <λ/8@632,8 nm >ø25,4 mm: <λ/5@632,8 nm
Coatings	Uncoated, available upon request

Standard products

MATERIAL	FACE DIMENSIONS	THICKNESS	SURFACE FLATNESS	SKU	PRICE
BK7	ø25,4 mm	6,35 mm	<λ/8@632,8 nm	6247	14 €
	ø38,1 mm	6,35 mm	<λ/5@632,8 nm	6248	24 €
	ø50,8 mm	6,35 mm	<λ/5@632,8 nm	6249	32 €
	ø50,8 mm	9,525 mm	<λ/5@632,8 nm	6250	34 €
	ø76,2 mm	12,7 mm	<λ/4@632,8 nm	6253	100 €
	ø101,6 mm	12,7 mm	<λ/4@632,8 nm	6254	160 €
UVFS	ø12,7 mm	2 mm	<λ/4@632,8 nm	6241	14 €
	ø12,7 mm	6 mm	<λ/8@632,8 nm	6242	14 €
	ø25,4 mm	2 mm	<λ/2@632,8 nm	6222	16 €
	ø25,4 mm	5 mm	<λ/8@632,8 nm	6223	16 €
	ø38,1 mm	6,35 mm	<λ/5@632,8 nm	6244	30 €
	ø50,8 mm	6,35 mm	<λ/5@632,8 nm	6245	68 €
	ø50,8 mm	9,525 mm	<λ/4@632,8 nm	6246	74 €
	ø76,2 mm	12,7 mm	<λ/4@632,8 nm	6251	170 €
	ø101,6 mm	12,7 mm	<λ/4@632,8 nm	6252	280 €
	20 x 40 mm	5 mm	<λ/6@632,8 nm	6243	40 €