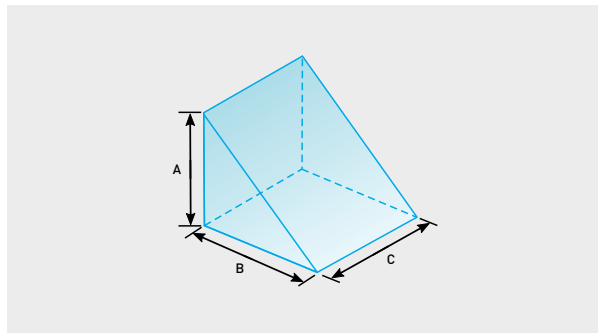
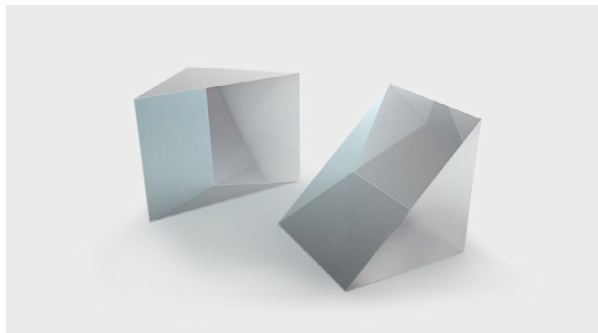


Right-angle prisms



4Lasers standard uncoated right-angle (45°-90°-45°) design prisms are fabricated from UVFS and BK7 optical glasses and have three optically polished rectangular surfaces (refer to the drawing). These prisms are popular at 90° internal or external beam bending, 180° beam folding, image rotation. These applications are based on the total internal reflection at glass-air boundary inside the prism,

except 90° external beam bending, which requires metallic or highly reflective dielectric thin film to be applied onto the hypotenuse face. Antireflective coatings have to be applied in order to optimize the optical transmission for a particular application. Contact us for coating service, custom solutions, and pricing.

Main features

- Fabricated from high-quality UV grade fused silica, BK7
- Rectangular faces are optically polished
- Standard and advanced grade selection
- Metallic and dielectric thin-film coatings, custom substrate material and dimensions are available upon request

Application examples

- 90° internal or external mirror
- Retroreflector
- Components for cube beamsplitter

Standard specifications

RIGHT-ANGLE PRISMS	
Substrate material	BK7, UVFS
Wavelength range	Uncoated BK7 prisms: 350 nm - 2 μm Uncoated UVFS prisms: 185 nm - 2,1 μm
Clear aperture	>80% of face dimensions
Dimensions tolerance	+0/-0,25 mm
90° angle tolerance	Regular grade: ±2 arcmin Advanced grade: ±5 arcsec
Pyramidal tolerance	Regular grade: ±1 arcmin Advanced grade: ±30 arcsec
Protective chamfers	<0,25 mm at 45°
Surface quality	40-20 S-D
Surface flatness	≤λ/4 @ 632,8 nm
Coatings	Uncoated, available upon request

Standard products

MATERIAL	DIMENSIONS A = B = C	GRADE	SKU	PRICE
BK7	5 mm	Regular	6570	18 €
	10 mm	Regular	6571	20 €
		Advanced	6572	42 €
	20 mm	Regular	6573	31 €
Advanced		6574	57 €	
UVFS	5 mm	Regular	6576	45 €
	10 mm	Regular	6575	49 €
		Advanced	6567	93 €
	20 mm	Regular	6568	59 €
		Advanced	6569	116 €