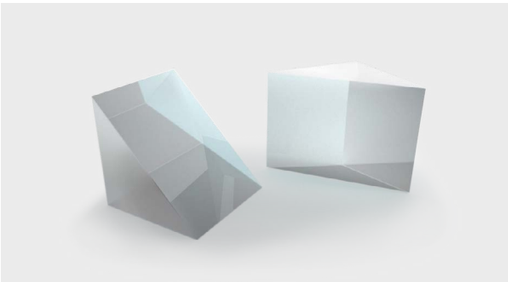
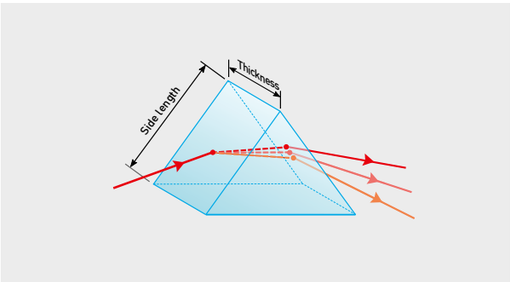
Dispersing prisms





4Lasers standard uncoated isosceles dispersing prisms are fabricated from UVFS, BK7, SF11 optical glasses and offer different dispersive properties. Used in both intra- and extra-cavity setups for ultrashort laser pulse temporal manipulation. Their construction enables to use them at Brewster angle, therefore p-polarized light losses are extremely low.

Main features

- Fabricated from high-quality UV fused silica, BK7, SF11 glasses
- Input and output faces are optically polished (refer to the drawing)
- Small losses for p-polarized light
- Group delay dispersion adjustment of ultrashort pulses
- Antireflective coatings, custom design, substrate material and dimensions available upon request

Application examples

- Compression of ultrashort laser pulses
- Dispersion compensation in mode-locked lasers
- Spatial separations of different spectral components

Standard specifications

DISPERSING PRISMS	
Substrate material	BK7, SF11, UVFS
Wavelength range	Uncoated BK7 prisms: 350 nm - 2 µm Uncoated UVFS prims: 185 nm - 2,1 µm Uncoated SF11 prisms: 420 nm - 2,3 µm
Design wavelength	800 nm
Clear aperture	80% of face and length width
Dimensions tolerance	±0,25 mm
Angle tolerance	±2 arcmin
Protective chamfers	<0,35 mm at 45°
Surface quality	40-20 S-D
Surface flatness	<λ/4@632,8 nm
Coatings	Uncoated, available upon request

Standard products

MATERIAL	APEX ANGLE	THICKNESS	SIDE LENGTH	MAX INPUT BEAM DIAMETER	SKU	PRICE
SF11	59°	10 mm	15 mm	6 mm	6617	49 €
		18 mm	25 mm	12 mm	6622	95 €
		25 mm	50 mm	22 mm	6623	195 €
BK7	67°	10 mm	15 mm	6 mm	6615	40 €
		18 mm	25 mm	12 mm	6618	69 €
		25 mm	50 mm	22 mm	6619	140 €
UVFS	69°	10 mm	15 mm	6 mm	6616	72 €
		18 mm	25 mm	12 mm	6620	125 €
		25 mm	50 mm	22 mm	6621	260 €