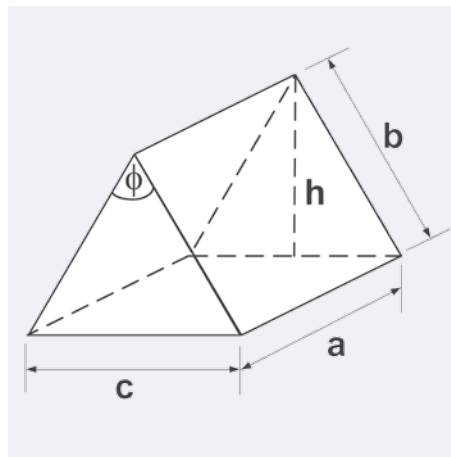


# Gleichschenklige Brewster-Prismen

# Isosceles Brewster Prisms

Das gleichschenklige Brewster-Prisma wird hauptsächlich zur Strahlablenkung und zur Kompensation der GVD (group velocity dispersion) in fs-Laseranwendungen eingesetzt. Die Kathete wird im Brewster-Winkel in den Strahlengang gestellt. Hierdurch wird das zur Grenzfläche parallel polarisierte Licht nahezu verlustfrei transmittiert, das senkrecht polarisierte Licht zu einem Großteil reflektiert.

Aufgrund dieser Eigenschaften werden die Prismen unentspiegelt angeboten.



The isosceles Brewster prism is primarily used in beam deflection and compensation of GVDs (group velocity dispersion) in fs laser applications. The cathetus is placed inside the beam path at the Brewster angle. Hereby the light that is polarized parallel to the surface is transmitted almost without any loss and light that is polarized perpendicular to the surface is reflected to a large extent.

On account of these properties, isosceles Brewster prisms are offered without a coating.

## Nomenklatur – Nomenclature

IB	-12.4	-69.1	-UV
Product code (Isosceles Brewster Prism)	Height h in mm	Apex angle $\phi$ in degree	Material code UV: fused silica SF: SF10 S1: Suprasil®1

SPECS	Material:	Fused silica, SF10, Suprasil®1	Surface quality:	5/4 x 0.063 for 1.0" substrates according to ISO 10110 20-10 according to MIL-O-1380A
	Dimension tolerance:	+ 0.00 mm; - 0.25 mm	Protective chamfer:	0.2 - 0.4 mm x 45°
	Angle tolerance:	± 2 arcmin	Clear aperture:	85 % of the dimensions
	Surface figure	3/0.25 according to ISO 10110 λ/8 according to MIL-O-1380A		

Part No.	Altitude h [mm]	Dimension a [mm]	Dimension b [mm]	Dimension c [mm]	Apex Angle $\phi$ [°]	Material
IB-10.5-68.7-S1	10.5	7.9	12.7	17.4	68.7	Suprasil® 1
IB-15.0-68.7-S1	15.0	12.70	18.20	20.60	68.7	Suprasil® 1
IB-19.0-68.7-S1	19.0	12.70	23.00	26.00	68.7	Suprasil® 1
IB-12.4-69.1-UV	12.4	15.00	15.00	17.00	69.1	Fused Silica
IB-13.0-60.6-SF10	13.0	15.00	15.00	15.10	60.6	SF10
IB-21.6-60.6-SF10	21.6	25.00	25.00	25.20	60.6	SF10

Most items are available from stock. Other sizes and materials are available upon request.

