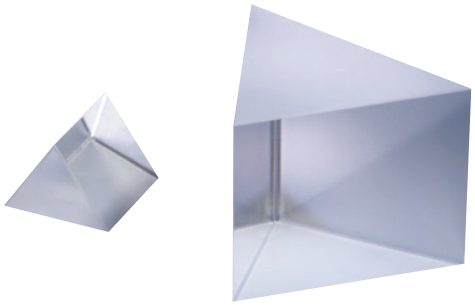
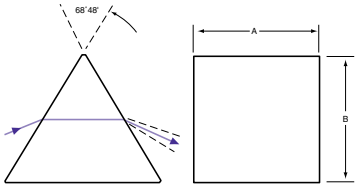
Brewster Prisms

- *Ideal for laser tuning*
- *Laser quality*





Specif ications
Material: UV grade Fused Silica
Dimensions: ± 0.5 mm
Apex Angle: ±5 arcmin
Clear Aperture: >85% of central dim
Chamfer: 0.3 mm x 45°
Uncoated

Brewster Prisms are designed to have an apex angle such that a p-polarized ray incident at Brewster's angle will pass through the prism parallel to the base at minimum deviation, and exit also at Brewster's angle. In this case surface reflection losses are negligible. Brewster Prisms are often used in situations where surface reflection losses cannot be tolerated.

Brewster Prisms are also frequently used to select a single wavelength from a multi-wavelength laser. Tuning is accomplished by tilting the prism.

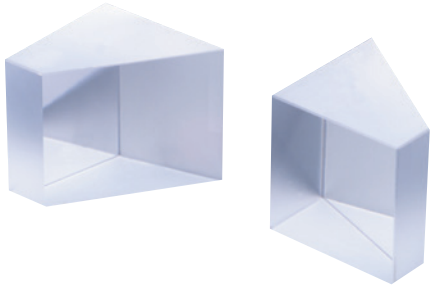
These prisms have very low surface reflection losses over the range 190-425 nm and are usable from 190-2500 nm.

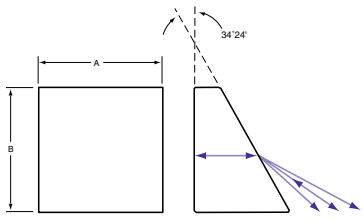
Brewster Prisms

Catalog Number	Material	Dimensions A (mm)	Dimensions B (mm)	Price US
24-2115	UV Fused Silica	15.0	15.0	$123.75
24-2198	UV Fused Silica	25.4	25.4	$242.00

Littrow Prisms

- *Ideal for laser tuning*
- *AR coatings*





Specifications
Material: UV grade Fused Silica
Dimensions: +0 / -0.254 mm
Apex Angle: <10 arcmin
Surface Finish: 10-5
Flatness: λ/10
Clear Aperture: >85% of central dim
Chamfer: 0.3 mm x 45°
Uncoated

Littrow Prisms are of the same design as Brewster prisms but cut in half vertically from the apex to the base.

They are normally used in a laser cavity or prism spectrometer to select a particular wavelength. In general, the beam is incident on the hypotenuse and is reflected back from the rear surface. It exits from the hypotenuse dispersed into its constituent wavelength components. Tuning is accomplished by tilting.

Ealing Littrow Prisms are supplied uncoated but should be coated with an antireflection coating designed for 45° for optimal performance.

Littrow Prisms

Catalog Number	Dimensions A (mm)	Dimensions B (mm)	Price US
24-2081	12.7	12.7	$91.68
24-2099	25.4	25.4	$146.68