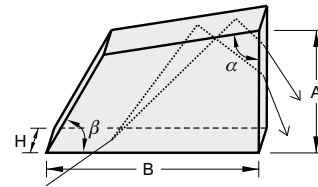


## PELLIN-BROCA PRISMS

### Features

- Extremely small loss of a p-polarized beam
- Light separated by wavelength is conveniently turned at an 90° angle with minimum deviation
- UV FS prisms provide 1.26° separation between 532 nm and 1064 nm

In a Pellin-Broca prism, an ordinary dispersing prism is split in half along the bisector of the apex angle. Using a right angle prism, the two halves are joined to create a dispersing prism with an internal right angle bend obtained by total internal reflection. The entrance beam is deviated at an 90° angle to its initial direction.



### Specifications

Material	BK7, UV FS
Surface quality	20 – 10 scratch & dig (MIL-PRF-13830B)
Surface flatness	$\lambda/10$ @ 633 nm
Angles	$\alpha = 79.5^\circ \pm 0.5^\circ$ , $\beta = 60^\circ \pm 1^\circ$
Design wavelength	546.1 nm
Dimensions	$\pm 0.2$ mm
Clear aperture	> 80% of dimensions

### Housing accessories

Tilt/Rotation Stage 860-0110

Find more at [EksmaOptics.com](http://EksmaOptics.com)



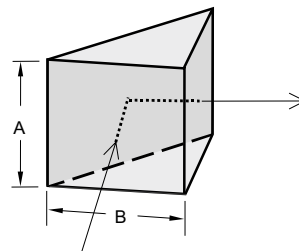
Material	A, mm	B, mm	H, mm	Catalogue number	Price, EUR
BK7	11.0	20.0	6.4	<a href="#">325-0206</a>	57
	23.5	40.0	12.7	<a href="#">325-0412</a>	63
UV FS	11.0	20.0	6.4	<a href="#">325-1206</a>	110
	15.0	26.0	15.0	<a href="#">325-1215</a>	121
	23.5	40.0	12.7	<a href="#">325-1412</a>	150

## RIGHT ANGLE PRISMS

### Features

- 45–45–90 degree prisms
- Can be used as internal or external reflectors or as retro-reflectors

These prisms are used to direct beams at 90 degrees by using a hypotenuse face in total internal reflection (TIR). Right angle prisms are often preferable to an inclined mirror in applications involving severe acoustic or inertial loads, because they are easier to mount and deform much less than a mirror in response to external mechanical stress. As long as acceptance angle limitations for TIR from the roof faces are not exceeded, right angle prisms can serve as a retro reflector, turning beams back to the original direction.



### Specifications

Material	BK7, UV FS
Surface quality	40 – 20 scratch & dig (MIL-PRF-13830B)
Surface flatness	$\lambda/4$ @ 633 nm
Clear aperture	80% of the face size
90° angle tolerance	$\pm 2$ arcmin or $\pm 5$ arcsec
Pyramidal tolerance	$\pm 1$ arcmin or $\pm 30$ arcsec
Dimensions	$\pm 0.25$ mm

For various HR or AR coatings, please refer to the Coatings section.

### Housing accessories

Prism Holders 840-0160, 840-0170

Find more at [EksmaOptics.com](http://EksmaOptics.com)



Size of face, A × B mm	90° angle tolerance	Pyramidal tolerance	BK7		UV FS	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR
5.0 × 5.0	2 arcmin	1 arcmin	<a href="#">330-0052</a>	18	<a href="#">330-1052</a>	45
10.0 × 10.0	2 arcmin	1 arcmin	<a href="#">330-0102</a>	20	<a href="#">330-1102</a>	49
12.5 × 12.5	2 arcmin	1 arcmin	<a href="#">330-0122</a>	22	<a href="#">330-1122</a>	51
15.0 × 15.0	2 arcmin	1 arcmin	<a href="#">330-0152</a>	25	<a href="#">330-1152</a>	55
20.0 × 20.0	2 arcmin	1 arcmin	<a href="#">330-0202</a>	31	<a href="#">330-1202</a>	59
25.0 × 25.0	2 arcmin	1 arcmin	<a href="#">330-0252</a>	37	<a href="#">330-1252</a>	70
10.0 × 10.0	5 arcsec	30 arcsec	<a href="#">330-0105</a>	42	<a href="#">330-1105</a>	93
12.5 × 12.5	5 arcsec	30 arcsec	<a href="#">330-0125</a>	44	<a href="#">330-1125</a>	95
15.0 × 15.0	5 arcsec	30 arcsec	<a href="#">330-0155</a>	50	<a href="#">330-1155</a>	103
20.0 × 20.0	5 arcsec	30 arcsec	<a href="#">330-0205</a>	57	<a href="#">330-1205</a>	116
25.0 × 25.0	5 arcsec	30 arcsec	<a href="#">330-0255</a>	73	<a href="#">330-1255</a>	142

Custom fabrication also available: coating, cutting, edging, drilling according to your specification.

Contact us for other types of prisms e.g. trapezoidal, various isosceles, Dove, Amici, Penta, etc.