

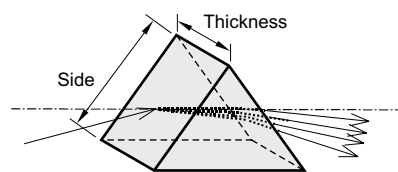
## LASER DISPERSING PRISMS

- Separate light by wavelength
- Are made so that entrance and exit beams pass through at the Brewster angle

Like Brewster angle windows, laser dispersing prisms can be used inside the cavity of a laser operating on very low gain laser transitions, where even slight reflection losses may be intolerable.

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

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



### SPECIFICATIONS

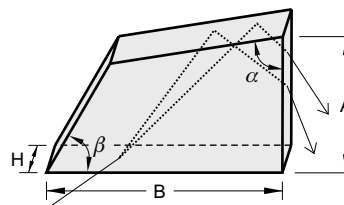
Material	BK7, FS, UV FS, SF11
Surface quality	40–20 scratch & dig
Surface flatness	$\lambda/4$ @ 633 nm
Apex angle tolerance	$\pm 2$ arcmin
Size	25 mm side length, 18 mm thickness
Design wavelength	800 nm

Material	Catalogue number	Price, EUR
BK7	320-0218	69
UV FS	320-1218	125
FS	320-3218	117
SF11	320-8218	95

## PELLIN-BROCA PRISMS

- Extremely small loss of a p-polarized beam
- Light separated by wavelength is conveniently turned at an  $90^\circ$  angle with minimum deviation
- FS prisms provide  $1.26^\circ$  separation between 532 nm and 1,064 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  $90^\circ$  angle to its initial direction.



### SPECIFICATIONS

Material	BK7, FS, UV FS
Surface quality	20–10 scratch & dig
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  
See page 5.113



Material	Catalogue number	A, mm	B, mm	H, mm	Price, EUR
BK7	325-0206	11.0	20.0	6.4	57
	325-0412	23.5	40.0	12.7	63
UV FS	325-1206	11.0	20.0	6.4	110
	325-1215	15.0	26.0	15.0	121
	325-1412	23.5	40.0	12.7	150
FS	325-3206	11.0	20.0	6.4	89
	325-3215	15.0	26.0	15.0	97
	325-3412	23.5	40.0	12.7	120