

Pellin-Broca Prisms

Product Description:

A Pellin-Broca prism consists of two dispersing prisms joined by a right angle prism, as indicated in the figure 1. A light beam enters the prisms via surface S1, undergoes total internal reflection from S2 surface and exits via surface S3. The prism is designed in a way that one particular wavelength is deviated by 90°. As the prism is rotated, the selected wavelength which is deviated by 90° is changed without changing the geometry or relative positions of the input and output beams.

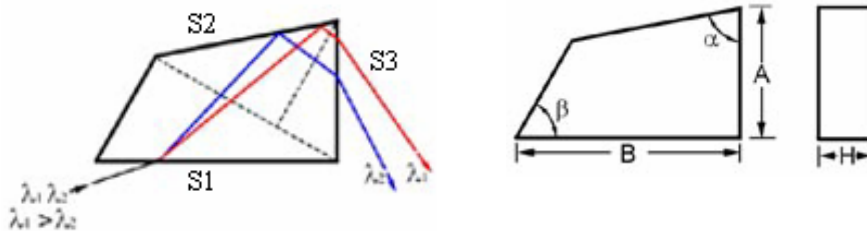
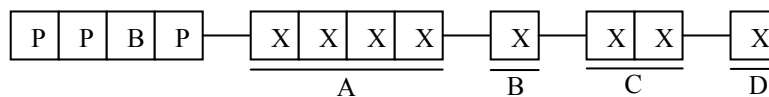


Figure 1: Schematic drawings of a Pellin-Broca prism

Specifications:

Material	BK7 or Fused Silica
Design Wavelength	546.1nm
Dimension Tolerance	0.0, -0.2mm
α	79.5°
β	60°
Angular Tolerance (α, β)	< 20 arc minutes
Flatness	$\lambda / 4 @ 632.8\text{nm}$
Clear Aperture	> 85%
Surface Quality	20~10
Coating	Specified by customer

Ordering Information:



A	Wavelength	546=0546nm
		1310=1310nm
		XXXX=Your application wavelength
B	Material	1=BK7
		2=Fused Silica
		0=Special
C	Size	01=11.0X20.0X6.4
		Check standard size table for standard size
		00=Custom size
D	Coating	1=yes
		0=no

Standard Size Table (Material: BK7 Grade A Optical Glass or UV Grade Fused Silica)

Dimension P/N	A (mm)	B (mm)	H (mm)
01	11.0	20.0	6.4
02	23.5	40.0	12.7
03	36.0	60.0	25.4