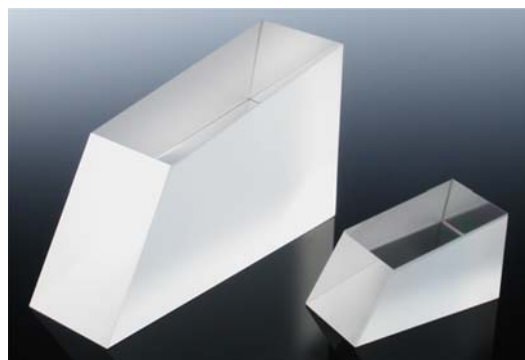
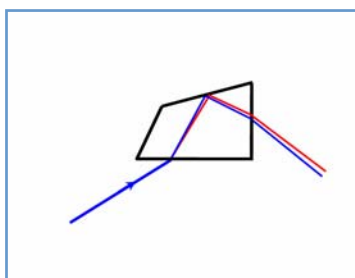


# Pellin-Broca Prisms



Pellin-Broca prisms are constant-deviation dispersing prisms. They produce 90° deviation and are used to separate laser lines.

The beam is input into the base of the prism such that total internal reflection occurs at the opposite face.



Due to a long path length inside the glass the maximum amount of dispersion takes place. Beams emerging from the exit face have a wide angle of separation by wavelength so that adjacent lines can easily be distinguished. They may be used to separate harmonics or to compensate for group velocity dispersion in ultra-fast lasers.

These prisms are manufactured to laser standards. They are made from BK7 or UV fused silica:

BK7 ( $n_d = 1.52$ ,  $v_d = 64.2$ )

UVFS ( $n_d = 1.46$ ,  $v_d = 67.8$ )

The accuracy of these prisms is controlled by the precision of the prism angles. They are made to an accuracy of 30 arc minutes.



We offer Pellin-Broca prisms uncoated but special coatings can be applied on request.

We can supply Pellin-Broca prisms in the following standard sizes (in mm):

Base	Height	Thickness
20	11.0	12.7
40	23.5	12.7
60	36.0	19.1

Other sizes will be considered on special request.

Typical Specifications	
Material:	BK7A, UVFS
Surface flatness:	$\lambda/10$ @ 633 nm
Surface quality:	10/5
Angles:	< 30 arcmin
Dimensions:	+0.0 / -0.2 mm

To request a quote or to order, please specify:

Quantity — Material — Base Size

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For a quotation — please phone, fax or email us with details of your requirements.