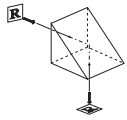
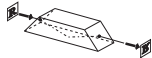
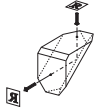
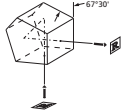
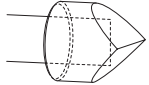
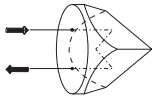
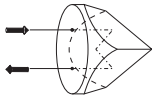




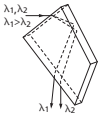
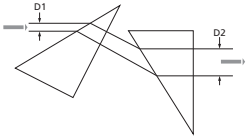
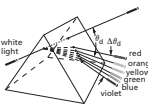
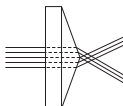
Prisms and Retroreflectors

3

Selection Guide

Product Type	Description	Page
Right-Angle Prisms P90, P180, PRA, RAP	 <p>Right-angle prisms bend the image by 90 degrees and invert the image. Right angle prisms may also be used to retroreflect (bend the image 180 degrees) a collimated beam.</p>	3.3
Dove Prisms DP	 <p>Dove prisms are used as image rotators or as 180° retroreflectors. As the prism is rotated, the image passing through will rotate at twice the angular rate of the prism.</p>	3.7
Roof Prisms PRF	 <p>Roof prisms bend the image by 90 degrees and rotate the image 180 degrees. Unlike right-angle prisms, they do not reverse the image.</p>	3.9
Penta Prisms PPA, PPS	 <p>Penta prisms bend the image by 90 degrees but leave the image unchanged.</p>	3.10
Porro Prisms PORR	 <p>A Porro prism is essentially a circular section of a right-angle prism taken from the center of the hypotenuse face. An image travelling through a Porro prism is rotated by 180 degrees and offset from the entrance point. Porro prisms are most often used in pairs to offset a beam but to keep its direction and orientation constant.</p>	3.11
Solid Glass Retroreflectors CCG	 <p>Solid glass retroreflectors (also known as corner-cube reflectors) reflect light parallel to the incident beam but in the opposite direction. If the beam fills the effective aperture, it will be reflected back exactly on itself.</p>	3.12
Broadband Hollow Retroreflectors CCH	 <p>Broadband hollow retroreflectors consist of three flat mirrors assembled into a mutually orthogonal inside corner. These reflectors eliminate wavelength-dispersion effects.</p>	3.13

Selection Guide (continued)

Product Type	Description	Page
Pellin Broca Prisms PLBC	 <p>In a Pellin Broca prism, light enters the right-angle prism normal to one of its faces, is turned exactly 90°, is presented to the second "half" dispersing prism in minimum deviation, and hence exits the Pellin Broca prism deviated at exactly 90° to its initial direction. This is what is meant by calling the Pellin Broca prism a "constant deviation prism".</p>	3.14
Mounted Anamorphic Prisms GPA, AP, APUV	 <p>Anamorphic prisms are used to magnify beam size along one axis while leaving the beam unchanged along the other axis. They are always used in pairs and are mounted at an incidence angle close to Brewster's angle.</p>	3.16
Equilateral Dispersing Prisms PES, PEH, EDP Isoceles Brewster Prisms IB	 <p>Dispersing prisms are used to separate a beam of white light into its component colors. Generally, the light is first collimated and then dispersed by the prism. A spectrum is then formed at the focal plane of a lens or curved mirror. The dispersion of an isosceles Brewster prism is less than that of an equilateral prism.</p>	3.18
Axicon Prisms AXC	 <p>Axicons are cone-shaped prisms used to change an incoming beam into a ring of light. The diameter of the ring is a function of the cone apex angle and the distance of the image plane from the prism. The width of the light band is a function of the incoming beam diameter.</p>	3.21