

# Penta Prisms

## Optics

Lenses

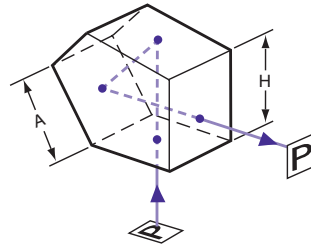
Mirrors & Beamsplitters

Prisms & Polarizers

Filters

Pinholes

- **Precise 90 degree deviation**
- **Designed for 400-700 nm**



### Specifications

**Material:** BK7 Glass

**Dimension Tolerance:** +0 / -0.254 mm

**Surface Flatness:**  $\lambda/4$

**Angular Tolerance:** <10 arcsec

**Clear Aperture:** > 85% of central dim.

Penta Prisms deviate an incident beam through 90° without inverting or reversing it. They also show constant deviation (i.e. the beam is deviated through 90° irrespective of the orientation of the prism). The accuracy of the 90° deviation is therefore only dependent on the manufacturing tolerances of the prism. These prisms are extremely useful when precise orientation of

the prism is not possible and also where the path length through an instrument needs to be shortened. Typical applications include range finding, surveying, alignment, and cinephotography. The reflecting faces are coated and the entrance and exit faces have an antireflection coating optimized for 400-700 nm.

### Penta Prisms

Catalog Number	Side		Price US
	A (mm)	H (mm)	
24-1364	7.0	6.0	\$77.00
24-1372	10.0	10.0	\$68.00
24-3840	20.0	20.0	\$89.00

## Opto-mechanics

Breadboards & Rails

Mounting Hardware

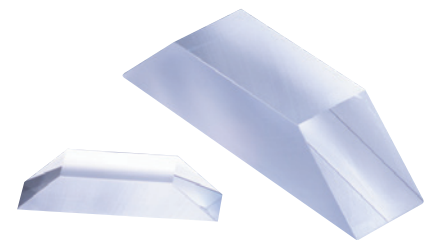
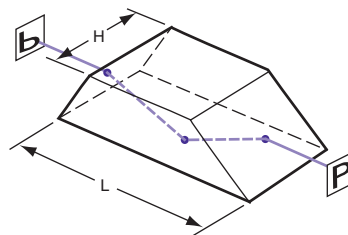
Mirror & Component Mounts

Manual Micro Positioners

Motorized Positioners

# Dove Prisms

- **Image inversion and rotation**
- **Optimized for 400-700 nm**



### Specifications

**Material:** BK7 Glass

**Dimension Tolerance:** +0 / -0.254 mm

**Angle Tolerance:** <3 arcmin

**Surface Quality:** 20-10

**Flatness:**  $\lambda/4$

**Coating:** None

**Chamfer:** 0.3 mm x 45°

**Clear Aperture:** > 85% of central dim.

Dove Prisms are a truncated form of right angle prism. They use total internal reflection to produce an inverted image which emerges without any beam deviation. The main application for these prisms are as image rotators. Rotating the prism about an optical axis results in the image rotating at double the

angular velocity of the prism. It is very important that the incident beam is collimated for optimal performance. In addition the large reflecting face must be kept very clean.

### Dove Prisms

Catalog Number	Side		Price US
	H (mm)	L (mm)	
24-1414	10.0	42.3	\$74.00
24-1430	15.0	63.4	\$75.00
24-1448	20.0	80.0	\$110.00