

[See all 20 Products in Family](#)

TECHSPEC® 50mm, MgF₂ Coated, High Tolerance Penta Prism



Stock #47-459 **20+ In Stock**

⊖ 1 ⊕ ₹27,270

ADD TO CART

Volume Pricing	
Qty 1-5	₹27,270 each
Qty 6-25	₹21,780 each
Qty 26-49	₹20,430 each
Need More?	Request Quote

Product Downloads

General

Penta Prism **Type:**

Physical & Mechanical Properties

50.00 **Length (mm):**

±0.10 **Dimensional Tolerance (mm):**

Protective as needed **Bevel:**

50.00 **Length of Legs (mm):**

Optical Properties

MgF₂ & Aluminized **Coating:**

[N-BK7](#) **Substrate:**

40-20 **Surface Quality:**

Right-Handed **Image Orientation:**

Coating Specification:
Entrance/Exit Faces: R_{avg} ≤ 1.75% @ 400 - 700nm
Reflecting Surfaces: Aluminized, Inconel & Black Paint

90 **Ray Deviation (°):**

400 - 700 **Wavelength Range (nm):**

Damage Threshold, By Design:
Entrance & Exit Faces: 10 J/cm² @ 532nm, 10ns
Reflecting Surfaces: 0.3 J/cm² @ 532 & 1064nm, 10ns

±1 **Beam Deviation Tolerance (arcmin):**

1.00 **Power (fringes) @ 632.8nm:**

0.25 **Irregularity (fringes) @ 632.8nm:**

Regulatory Compliance

[Compliant](#) **RoHS 2015:**

[Compliant](#) **Reach 223:**

[View](#) **Certificate of Conformance:**

Singapore **Country of Origin:**

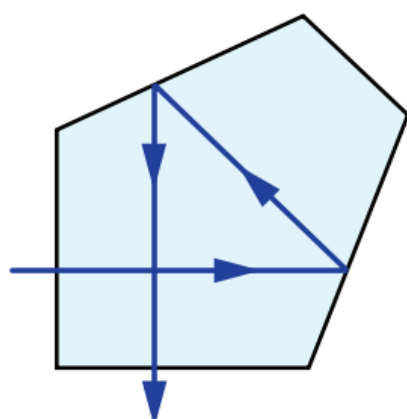
Edmund Optics India Private Limited **Imported By:**

Product Details

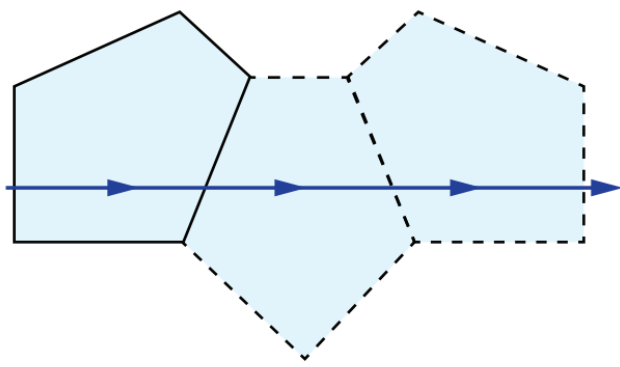
- Ray Deviation of 90°
- Right Handed Image
- Optical Tool for Defining a Right Angle
- Additional [Penta Prism](#) Options Available

TECHSPEC® N-BK7 Penta Prisms are five-sided prisms featuring a ray deviation of 90° and a right-handed image. The reflecting surfaces are aluminized. Slight movement of the prism does not affect the true right angle at which light rays are reflected, making a penta prism the ideal optical tool for defining a right angle in an optical system. TECHSPEC® N-BK7 Penta Prisms are made from precision N-BK7 for use in a variety of visible light applications. These prisms are offered with a VIS 0° or MgF₂ coating, in a variety of sizes.

Technical Information

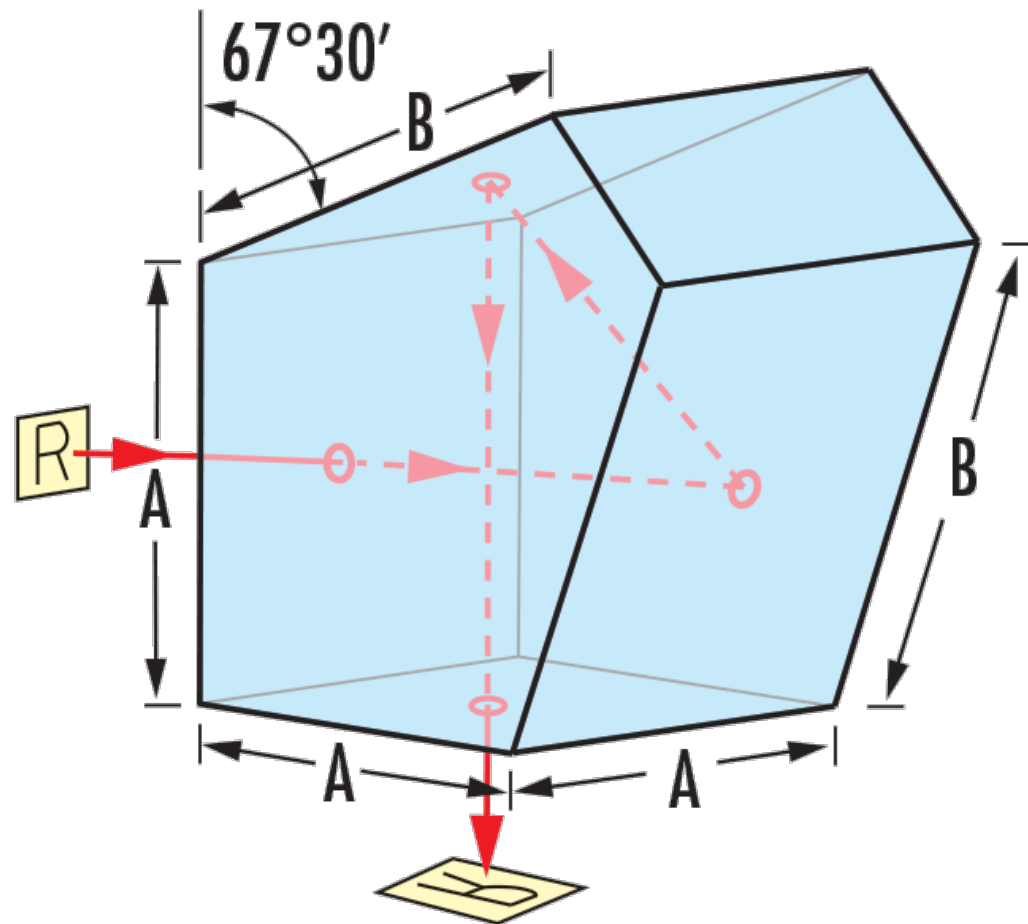


Penta Prism Ray Path



Penta Prism Tunnel Diagram

Stock No.	Coating	Dimensions	
		A	B
#85-159	MS 0°	0.50	0.60
#85-160	MS 0°	1.00	1.20
#45-112	MgF ₂	5.00	6.10
#48-595	MS 0°		
#32-030	MgF ₂	10.00	11.95
#48-596	MS 0°		
#43-502	MgF ₂	15.00	15.96
#48-597	MS 0°		
#31-051	MgF ₂	20.00	21.65
#48-598	MS 0°		
#42-779	MgF ₂	25.00	27.90
#47-458	MgF ₂		
#48-599	MS 0°		
#45-073	MgF ₂	30.00	32.47
#48-600	MS 0°		
#45-402	MgF ₂	35.00	37.88
#48-601	MS 0°		
#45-674	MgF ₂	40.00	43.30
#48-602	MS 0°		
#45-675	MgF ₂	45.00	48.71
#48-603	MS 0°		
#45-676	MgF ₂	50.00	54.12
#47-459	MgF ₂		
#48-604	MS 0°		



Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

Learn more about our [custom manufacturing capabilities](#) or submit an inquiry [here](#).
