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TECHSPEC® 10mm,



Please select your shipping country to view the most accurate inventory information, and to determine the correct Edmund Optics sales office for your order.

Select Your Country/Region: European Union

Submit

1

€101^{,00}

ADD TO CART

Volume Pricing

Qty 1-5	€101,00 each
Qty 6-25	€81,00 each
Qty 26-49	€76,00 each
Need More?	Request Quote

Prices shown are exclusive of VAT/local taxes

Product Downloads

- STEP:step
- Curve:pdf
- PDF Drawing:pdf
- IGES:igs
- eDrawing:eprt
- EO Spec Sheet
- [Download All](#)

General

Type: Penta Prism

Physical & Mechanical Properties

Length (mm): 10.00

Dimensional Tolerance (mm): ±0.10

Bevel: Protective as needed

Length of Legs (mm): 10.00

Optical Properties

Coating: VIS 0° & Aluminized

Substrate: **N-BK7**

Surface Quality: 60-40

Image Orientation: Right-Handed

Coating Specification: Entrance/Exit Faces: $R_{avg} \leq 0.4\%$ @ 425 - 675nm
Reflecting Surfaces: $R_{avg} > 85\%$ @ 400 - 700nm w/Black Overpaint

Ray Deviation (°): 90

Wavelength Range (nm): 425 - 675

Damage Threshold, By Design: Entrance & Exit Faces: 5 J/cm² @ 532nm, 10ns
Reflecting Surfaces: 0.3 J/cm² @ 532 & 1064nm, 10ns

Beam Deviation Tolerance (arcmin): ±5

Power (fringes) @ 632.8nm: 1.00

Irregularity 0.25
(fringes) @
632.8nm:

Regulatory Compliance

RoHS 2015: [Compliant](#)

Certificate of Conformance: [View](#)

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Need different specs or modifications?

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](#).

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

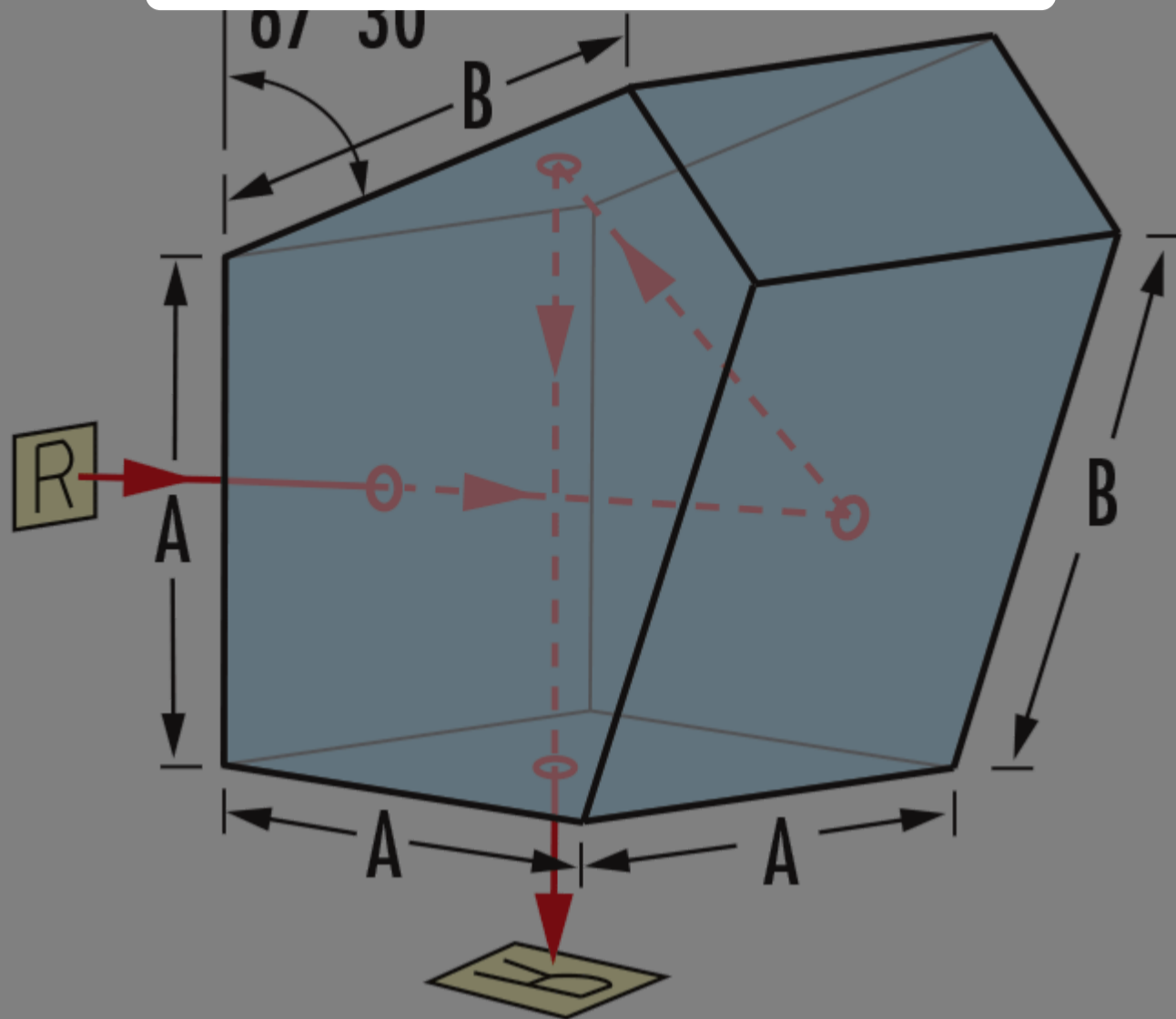
Penta Prism Tunnel Diagram

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

#48-602	VIS 0°		
#45-675	MgF ₂	45.00	48.71
#48-603	VIS 0°		
#45-676			54.12
#47-459			
#48-604			

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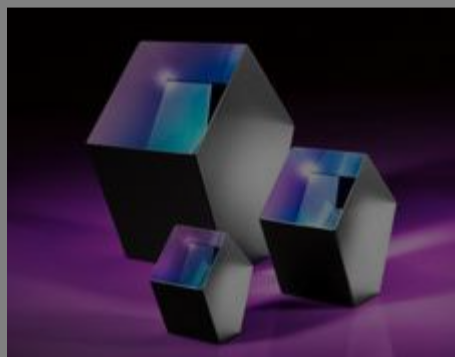


Frequently Purchased Together



#31-009 - 26mm Diameter, 4-6λ Mirror
€24,75

Qty



#32-030 - 10mm, MgF₂ Coated, Penta Prism
€87,50

Qty



#32-315 - 12.5mm Dia. x 40mm FL, MgF₂ Coated, Achromatic Doublet Lens
€86,00

Qty



#34-404 - 25mm VIS 0°, N-BK7 Right Angle Prism (Hypotenuse Coated)
€167,00

Qty

Resources

Media Type

- Application Note
- Video

APPLICATION NOTE

Anti-Reflection (AR) Coatings

APPLICATION NOTE

An Introduction to Optical Coatings

VIDEO

Optical Prisms Review

FAQ

Glossary

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GLOSSARY

Equilateral
(Dispersing)
Prism

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