

TECHSPEC<sup>®</sup> 20mm, MgF<sub>2</sub> Coated, Penta Prism



Stock **#31-051** 16 In Stock

-

1

+

€115<sup>,00</sup>

ADD TO CART

| Volume Pricing |                               |
|----------------|-------------------------------|
| Qty 1-5        | €115,00 each                  |
| Qty 6-25       | €92,00 each                   |
| Qty 26-49      | €86,50 each                   |
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!

 Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Type:

Penta Prism

Physical & Mechanical Properties

Length (mm):

20.00

Dimensional Tolerance (mm):

±0.10

|                                                                                                                                                                |                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
| Protective as needed                                                                                                                                           | Bevel:                             |
| 20.00                                                                                                                                                          | Length of Legs (mm):               |
| Optical Properties                                                                                                                                             |                                    |
| MgF <sub>2</sub> & Aluminized                                                                                                                                  | Coating:                           |
| N-BK7                                                                                                                                                          | Substrate: □                       |
| 60-40                                                                                                                                                          | Surface Quality:                   |
| Right-Handed                                                                                                                                                   | Image Orientation:                 |
| Coating Specification:<br>Entrance/Exit Faces: R <sub>avg</sub> ≤ 1.75% @ 400 - 700nm<br>Reflecting Surfaces: Aluminized, Inconel & Black Paint                |                                    |
| 90                                                                                                                                                             | Ray Deviation (°):                 |
| 400 - 700                                                                                                                                                      | Wavelength Range (nm):             |
| Damage Threshold, By Design: □<br>Entrance & Exit Faces: 10 J/cm <sup>2</sup> @ 532nm, 10ns<br>Reflecting Surfaces: 0.3 J/cm <sup>2</sup> @ 532 & 1064nm, 10ns |                                    |
| ±5                                                                                                                                                             | 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:        |

## Product Details

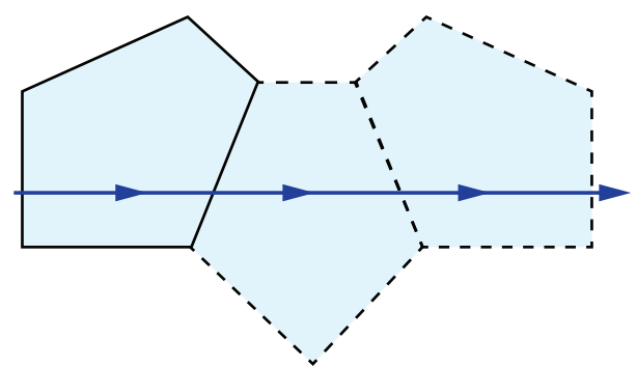
- Ray Deviation of 90°
- Right Handed Image
- Optical Tool for Defining a Right Angle
- Additional [Penta Prism](#) Options Available

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     |
| <a href="#">#85-159</a> | MS 0°            | 0.50       | 0.60  |
| <a href="#">#85-160</a> | MS 0°            | 1.00       | 1.20  |
| <a href="#">#45-112</a> | MgF <sub>2</sub> | 5.00       | 6.10  |
| <a href="#">#48-595</a> | MS 0°            |            |       |
| <a href="#">#32-030</a> | MgF <sub>2</sub> | 10.00      | 11.95 |
| <a href="#">#48-596</a> | MS 0°            |            |       |
| <a href="#">#43-502</a> | MgF <sub>2</sub> | 15.00      | 15.96 |
| <a href="#">#48-597</a> | MS 0°            |            |       |
| <a href="#">#31-051</a> | MgF <sub>2</sub> | 20.00      | 21.65 |
| <a href="#">#48-598</a> | MS 0°            |            |       |
| <a href="#">#42-779</a> | MgF <sub>2</sub> | 25.00      | 27.90 |
| <a href="#">#47-458</a> | MgF <sub>2</sub> |            |       |
| <a href="#">#48-599</a> | MS 0°            |            |       |
| <a href="#">#45-073</a> | MgF <sub>2</sub> | 30.00      | 32.47 |
| <a href="#">#48-600</a> | MS 0°            |            |       |
| <a href="#">#45-402</a> | MgF <sub>2</sub> | 35.00      | 37.88 |
| <a href="#">#48-601</a> | MS 0°            |            |       |
| <a href="#">#45-674</a> | MgF <sub>2</sub> | 40.00      | 43.30 |
| <a href="#">#48-602</a> | MS 0°            |            |       |
| <a href="#">#45-675</a> | MgF <sub>2</sub> | 45.00      | 48.71 |
| <a href="#">#48-603</a> | MS 0°            |            |       |
| <a href="#">#45-676</a> | MgF <sub>2</sub> | 50.00      | 54.12 |
| <a href="#">#47-459</a> | MgF <sub>2</sub> |            |       |
| <a href="#">#48-604</a> | 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](#).