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## 4.76mm Diameter, Ruby Half-Ball Lens



Stock #49-563 **20+ In Stock**

⊖ 1 ⊕ €34<sup>.50</sup>

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### Volume Pricing

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| Qty 1-10   | €34,50 each                   |
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**i** Prices shown are exclusive of VAT/local taxes

### Product Downloads

### General

Half-Ball Lens **Type:**

### Physical & Mechanical Properties

4.76 **Diameter (mm):**

2.38 **Radius R (mm):**

3.98 **Specific Gravity (g/cm<sup>3</sup>):**

2.38 **Thickness (mm):**

300,000 **Compressive Strength (psi):**

±2.54 **Diameter Tolerance (µm):**

## Optical Properties

Ruby Doped Sapphire (Al<sub>2</sub>O<sub>3</sub>) **Substrate:**

Uncoated **Coating:**

1.77 **Index of Refraction (n<sub>d</sub>):**

0.64 **Sphericity (µm):**

## Environmental & Durability Factors

2053.00 **Melting Temperature (°C):**

## Regulatory Compliance

**Compliant** **RoHS 2015:**

**View** **Certificate of Conformance:**

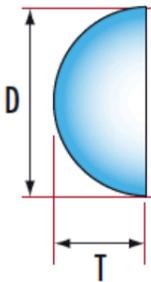
**Compliant** **Reach 247:**

## Product Details

- Excellent for Severe Environments
- High Chemical Stability
- [Sapphire and Ruby Ball Lenses](#) Also Available

Sapphire and Ruby Half-Ball Lenses feature a very short back focal length with the convenience of a flat surface for easy mounting. Sapphire features a high index of refraction and excellent broadband transmission characteristics. Ruby half-ball (hemispherical) lenses are easier to see and, therefore, easier to handle for physical applications. Sapphire and Ruby Half-Ball Lenses are very chemically stable and are great for severe environments, high-temperature applications, and applications requiring high melting points. Typical applications include fiber communication, endoscopy, microscopy, optical pick-up devices, and laser measurement systems.

## Technical Information



## 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](#).