2.5mm Diamete...

Sapphire and Ruby Ball Lenses

- 1 +

€29,00

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Volume Pricing	
Qty 1-10	**€29,00** each
Qty 11-49	**€23,25** each
Need More?	**Request Quote**

Prices shown are exclusive of VAT/local taxes

Product Downloads

STEP:stp | PDF Drawing:pdf
IGES:igs | Zemax:zar
Zemax:zmx | eDrawing:eprt
Code V:seq | EO Spec Sheet
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General

Type:	Ball Lens

Physical & Mechanical Properties

Diameter (mm):	2.50	**Specific Gravity (g/cm^3):**	3.98
Compressive Strength (psi):	300,000	**Diameter Tolerance (µm):**	±2.54

Optical Properties

Substrate: ⓘ	Ruby Doped Sapphire (Al_2O_3)	**Coating:**	Uncoated
Wavelength Range (nm):	600 - 5500	**Index of Refraction (n_d):**	1.77
Sphericity (µm):	0.625	**Wavelength Range (µm):**	0.6 - 5.5

Material Properties

Coefficient of Thermal Expansion CTE (10^{-6}/°C):	8.4	**Porosity (%):**	0.00

Environmental & Durability Factors

Melting Temperature (°C):	2053.00

Regulatory Compliance

RoHS 2015:	**Compliant**	**Certificate of Conformance:**	**View**

Reach 247:	Compliant

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Need different spec

Edmund Optics offers comprehensive custo lication requirements. Whether in the prototyping p s. Our experienced engineers are here to assist—from concept

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

- Excellent for Severe Environments
- High Strength and Hardness
- High Chemical Stability
- **Sapphire and Ruby Half-Ball Lenses** Also Available

Sapphire and Ruby Ball Lenses are both made from Al203. Ruby or Ruby-Doped sapphire owes its red color to traces of chromium oxide (chromium content for ruby balls is typically >0.5%). While their physical and chemical properties are similar, Sapphire has superior optical transmission. Ruby Ball Lenses are easier to see and handle for physical applications. Sapphire and Ruby Ball Lenses are ideal for improving signal coupling between fibers, emitters, and detectors. They are also used in endoscopy, bar code scanning, ball pre-forms for aspheric lenses, and sensor applications. **Sapphire and Ruby Half-Ball Lenses** are also available.

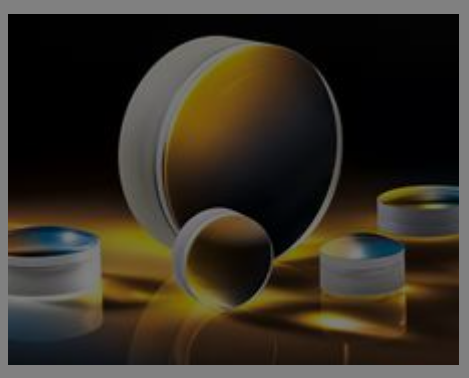
For general information about ball lens, as well as how to calculate the NA and Focal Length, view **Understanding Ball Lenses.**

Related Products

#12-869 - Small Lens Clamp for 1-3mm Dia. Optics
€160,00
Qty

Frequently Purchased Together

#36-482 - 4.5" Angle Mirror Mount
€378,00
Qty



#33-921-INK - 75mm Dia. x 100mm FL, VIS 0°, Inked, Achromatic Lens
€398,00
Qty

#02-531 - 250µm, Optical Grade Plastic Optical Fiber Unjacketed
€1,00
Qty

#43-638 - 1.0mm Diameter, Sapphire Ball Lens
€28,25
Qty

Compatible Mounts

	Title	Type	Compare	Stock Number	Price ☐	Buy
MORE+ 	Small Lens Clamp fo… 3mm Dia… Optics				€160.00	10 In Stock 1

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TECHNICAL TOOL
Ball Lens Calculator

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Understanding Ball Lenses

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Sphericity

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