532nm, 25.4mm Dia., Diffractive Vortex Phase Plate

HOLO/OR Diffractive Vortex Phase Plates

Stock **#14-744** **2 In Stock**

- 1 + **€4.753**.45

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Volume Pricing	
Qty 1+	**€4.753,45** each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

SPECIFICATIONS

Physical & Mechanical Properties

Clear Aperture CA (mm):
22.9

Diameter (mm):
25.40 +0.05/-0.15

Thickness (mm):
3.00 ±0.1

Optical Properties

Coating:
Laser V-Coat (532nm)

Design Wavelength DWL (nm):
532

Substrate:
Fused Silica (Corning 7980)

Input Beam Mode:
SM TEM_{00}

Overall Efficiency (%):
95

Topological Charge:
1

Outer Ring Size (Diffraction Limits):
2.02

Damage Threshold, Reference:
See Link for More Details

Regulatory Compliance

RoHS 2015:
Compliant

Certificate of Conformance:
View

Reach 233:
Compliant

PRODUCT DETAILS

- Convert Gaussian Beams to Donut-Shaped Energy Rings
- Vortex Phase Plates for 532nm and 1030nm Lasers Available
- Compatible with Collimated Single Mode Gaussian Input Beams

HOLO/OR Diffractive Vortex Phase Plates are diffractive optical elements (DOE) that convert an input beam from a Gaussian profile to a donut-shaped energy ring. These optical elements are composed of spiral-phase steps, the pattern of which controlling the phase of the transmitted beam. An optical lens can be used to focus the generated energy ring while maintaining the beam profile. HOLO/OR Diffractive Vortex Phase Plates are designed to work with collimated single mode (TEM00) Gaussian input beams, converting them to a TEM01 axially symmetric mode. These phase plates are available with designs for 532nm Nd:YAG lasers and 1030nm Yb:YAG lasers. Typical applications include solar coronagraphs, astronomy, high resolution microscopy, laser welding, optical tweezers, and quantum optics.

Note: Diffractive optical elements are not intended for use outside of their design wavelength. Diffractive optical elements will have decreased performance if their surfaces become dirty from oil or other substances. It is recommended to always use gloves or finger cots when handling these optics.

Edmund Optics offers a range of diffractive optical elements from HOLO/OR for laser applications, including:

- Diffractive Diffusers: used to convert an input laser beam to a defined shape with homogenized distribution
- Diffractive Beamsplitters: used to split an input laser beam into a 1D array or 2D matrix output
- Diffractive Beam Shapers: used to transform a nearly-Gaussian laser beam into a defined shape with uniform flat top intensity distribution
- Diffractive Beam Samplers: used to transmit an input laser beam while producing two higher order beams that can be used to monitor high power lasers
- Diffractive Axicons: used to transform an input laser beam to a Bessel beam that can be focused to a ring
- Diffractive Vortex Phase Plates: used to convert a Gaussian profile beam to a donut-shaped energy ring

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.