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Richardson Gratings™ 1800 Grooves, 12.7 x 12.7mm, 190-900nm, Plane Holographic Reflection Grating

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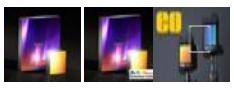
Richardson Gratings™ High Precision Reflective Holographic Diffraction Gratings



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- 1 + **C$208**.60

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Qty 1-9	**C$208.60** each
Qty 10-24	**C$187.74** each
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Product Downloads

General

Type:
Reflective Diffraction Grating

Master Reference:
300H

Physical & Mechanical Properties

Dimensions (mm):
12.7 x 12.7 ±0.1

Clear Aperture (%):
>90

Construction:
Holographic Grating

Length (mm):
12.70

Thickness (mm):
6.00 ±0.5

Width (mm):
12.70

Centering of Ruled Area on Substrate (mm):
±1

Alignment of Grooves to Edge (°):
±0.15

Groove Spacing Tolerance (%):
<0.05

Optical Properties

Groove Density (grooves/mm):
1800

Wavelength Range (nm):
190 - 900

Blaze Wavelength (nm):
250

Coating:
Aluminium

Substrate:
Float Glass

Reflected Wavefront, RMS:
λ/4

Polarization:
S, P and Average

Spectral Order (m):
1

Regulatory Compliance

Certificate of Conformance:
View

Product Details

- High Diffraction Efficiency
- Reduced Stray Light and More Accurate Periodicity than Ruled Gratings
- Wavelength Options from UV to NIR Regions Available
- Custom Sizes Available

Richardson Gratings™ High Precision Reflective Holographic Diffraction Gratings display reduced light scattering compared with ruled gratings, making them ideal for stray light sensitive applications such as Raman spectroscopy. The gratings are recorded in a photoresist by exposure to an intense laser interference pattern and then chemically developed to reveal a fringe pattern with a sinusoidal cross section. Gratings for use from the UV to NIR spectral regions are available.

Note: The surface of these gratings is very sensitive and should never be touched when handling the optic. If cleaning is required to remove dust particles, non-contact cleaning using clean compressed air is recommended.

Special Handling

These optics require special handling to avoid damage and ensure long-term performance. Proper handling, cleaning, and storage are essential to maintain optical quality. Explore our **Optics Cleaning Resources** for step-by-step guides and best practices. For personalized assistance, **Email us** or **Chat** with our technical support team.

Component Handling Tools

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.**