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[/ Traditional Coated 400 – 699nm Bandpass Interference Filters](#)

656nm CWL, 10nm FWHM, 12.5mm Mounted Diameter


 Stock #65-656 **2 In Stock**

 - 1 + C\$147⁰⁰
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| Volume Pricing | |
|----------------|-------------------------------|
| Qty 1-9 | C\$147.00 each |
| Qty 10-25 | C\$130.20 each |
| Qty 26-49 | C\$123.20 each |
| Need More? | Request Quote |

| Product Downloads | |
|-------------------|------------------------------|
| STEP:step | Curve:pdf |
| PDF Drawing:pdf | IGES:igs |
| eDrawing:eprt | |
| EO Spec Sheet | Download All |

General

| | |
|------------------------------|--|
| Type: Bandpass Filter | Typical Applications: H Emission Line |
|------------------------------|--|

Physical & Mechanical Properties

| | |
|---|------------------------------------|
| Diameter (mm): 12.50 +0.0/-0.2 | Clear Aperture CA (mm): 9.0 |
| Construction: Mounted in Black Anodized Ring | |

Optical Properties

| | |
|--|--|
| Angle of Incidence (°): 0 | Optical Density OD (Average): ≥3.0 |
| Center Wavelength CWL (nm): 656.00 ±2 | Center Wavelength CWL Tolerance (nm): ±2 |
| Full Width-Half Max FWHM (nm): 10.00 ±2 | Full Width-Half Max FWHM Tolerance (nm): ±2 |
| Minimum Transmission (%): ≥50 | Coating: Traditional Coated |
| Surface Quality: 80-50 | Blocking Wavelength Range (nm): 200 - 1200 |

Threading & Mounting

| | |
|---------------------------------------|--|
| Mount Thickness (mm): 7.5 ±0.1 | |
|---------------------------------------|--|

Environmental & Durability Factors

Operating Temperature (°C): -50 to +75

Regulatory Compliance

RoHS 2015: **Compliant**

Certificate of Conformance: **View**

Reach 247: **Compliant**

Need different specs or modifications?

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](#).

Product Details

- Available in UV, Visible, and IR Center Wavelengths
- 10 – 80nm Bandwidths Available
- Ideal for Biomedical Applications and Instrumentation Integration
- **193-399nm**, 400-699nm, and **700-1650nm** CWL Options Available

Traditional Coated 400 – 699nm Bandpass Interference Filters are used to selectively transmit a narrow range of wavelengths while blocking all others. These filters are ideal for a range of biomedical and quantitative chemical applications. Bandpass interference filters are widely used in instrumentation for various applications, including clinical chemistry, environmental testing, colorimetry, elemental and laser line separation, flame photometry, fluorescence, and immunoassays. In addition, Traditional Coated 400 – 699nm Bandpass Interference Filters are used to select discrete spectral lines from arc or gas discharge lamps and to isolate a particular line from Ar, Kr, Nd: YAG, and other lasers. Traditional Coated 400 – 699nm Bandpass Interference Filters are often used in conjunction with [laser diode modules](#) and [LEDs](#).

Traditional Coated Filters

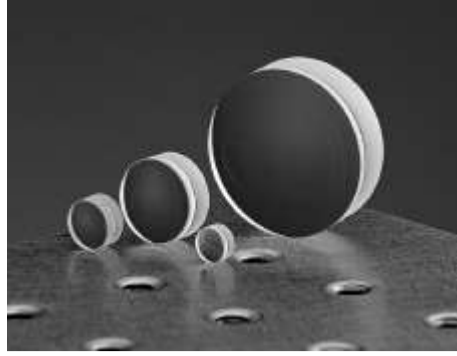
Traditional coated filters are fabricated in three sections, one of which determines the center wavelength (CWL), bandwidth (FWHM), and the shape of the transmittance curve while the other two control the blocking range of the filter. The bandpass section of Traditional Coated Bandpass Interference Filters is made by repetitive vacuum deposition of thin layers of partially reflecting dielectric compounds on a glass substrate. Rejection of wavelengths resulting from destructive interference is limited to within 15% of the central wavelength, therefore, additional glass or metallic blockers must be added to reduce out-of-band transmittance. Metallic blockers, such as layers of silver, reflect and absorb radiation outside of the filter passband and negate higher order passbands from X-ray to the long-wave infrared (LWIR). The blocking capabilities of metallic blockers are augmented by the addition of color transmitting glass and custom dyes that absorb UV or long wavelength radiation. After thin film deposition is complete, the three sections are scribed, laminated, cut, and mounted.

Technical Information

Frequently Purchased Together



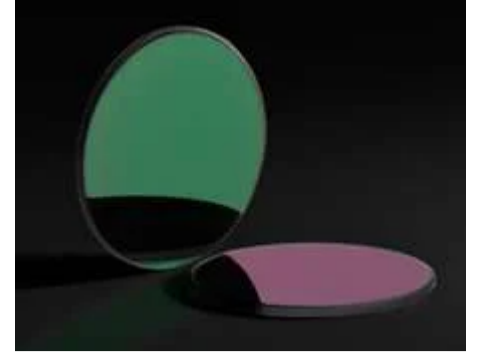
#00-736 - 7.75" x 10.75" Sheets,
Industrial Grade Lens Tissue
C\$98.00



#06-386 - 10mm Dia. x 25mm FL,
Grade 1, Achromatic Lens
C\$29.93



























#32-306 - Achromatic Lens 6.25mm
Dia. x 35mm FL, Uncoated
C\$17.93



#33-146 - 10.6µm CWL, 50.0mm
Diameter, 1.5 FWHM, IR
Bandpass Filter
C\$4,130.00

Compatible Mounts

| | Title | Type | Compare | Stock Number | Price | Buy |
|--|--|-----------------------|---------|--------------|--|---|
| | 12.5/12.7mm Optic Dia., SM05 Thin Mount, M4 | Fixed | | #13-789 | C\$27.30 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., SM05 Thin Mount, 8-32 | Fixed | | #13-790 | C\$27.30 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., E-Series Kinematic Mount | Adjustable - Tip-Tilt | | #15-865 | C\$60.90 Request Quote | CONTACT US <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., L-Slot Direct Mount | Fixed | | #36-416 | C\$82.60 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., Side Flange Direct Mount | Fixed | | #36-418 | C\$82.60 Request Quote | 11 In Stock <input type="text" value="1"/> |
| | 2.0 - 35.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #03-668 | C\$88.20 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 9.5 - 73.0mm Optic Dia., Three-Screw Adjustable Ring Mount | Fixed | | #36-605 | C\$116.20 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., Kinematic Mount, 2-Screws | Adjustable - Tip-Tilt | | #58-850 | C\$130.20 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., L-Slot and Rotation Direct Mount | Adjustable - Rotary | | #36-417 | C\$135.10 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., Compact Kinematic Mount, 2-Screws | Adjustable - Tip-Tilt | | #34-720 | C\$141.40 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 5.0 - 25.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-529 | C\$142.80 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 12.5/12.7mm Optic Dia., Kinematic Mount, 3-Screws | Adjustable - Tip-Tilt | | #58-853 | C\$145.60 Request Quote | 20+ In Stock <input type="text" value="1"/> |
| | 7.0 - 40.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-676 | C\$148.40 Request Quote | 20+ In Stock <input type="text" value="1"/> |

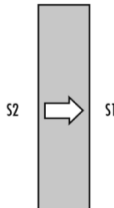
| | Title | Type | Compare | Stock Number | Price | Buy |
|---|---|---------------------------|---------|--------------|--|---|
| MORE+  | 10.0 - 60.0mm Optic Height, Metric Bar-Type Optic Holder | Fixed | | #55-530 | C\$151.20 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+  | 7.0 - 67.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-669 | C\$162.40 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., Compact Kinematic Mount, 3-Screws | Adjustable - Tip-Tilt | | #34-721 | C\$163.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 8.0 - 118.0 Optic Height, English Bar-Type Optic Holder | Fixed | | #03-666 | C\$168.00 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 4.0 - 36.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-077 | C\$219.80 Request Quote | 5 In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 2-Screws | Adjustable - Tip-Tilt | | #26-814 | C\$225.40 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., Stainless Steel Kinematic Mount, 3-Screws | Adjustable - Tip-Tilt | | #26-817 | C\$254.80 Request Quote | 20+ In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., X-Y Translating Optic Mount | Adjustable - Linear (XY) | | #62-955 | C\$365.40 Request Quote | 5 In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Lead Screw | Adjustable - Tip-Tilt | | #13-768 | C\$378.00 Request Quote | 6 In Stock <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., Top Adjust Kinematic Mount, Micrometer | Adjustable - Tip-Tilt | | #13-769 | C\$404.60 Request Quote | 5 In Stock <input type="text" value="1"/>  |
| MORE+  | 5.0 - 100.0mm Optic Dia., Self-Centering Jaw Clamp | Fixed | | #16-078 | C\$574.00 Request Quote | CONTACT US <input type="text" value="1"/>  |
| MORE+  | 12.5/12.7mm Optic Dia., X-Y-Z Translating Optic Mount | Adjustable - Linear (XYZ) | | #62-958 | C\$600.60 Request Quote | 5 In Stock <input type="text" value="1"/>  |

Check out our full selection of mounts [here](#).

Resources

Media Type


- Application Note
- Video
- Published Article
- FAQ



APPLICATION NOTE
The Importance of Optical Filter Orientation....



APPLICATION NOTE
Custom Bandpass Filter using Shortpass an...



VIDEO
Optical Filters Review



▶ VIDEO

Optical Filter Coatings: Comparison of Traditional a...



📄 PUBLISHED ARTICLE

Selecting Color Filter Glass for Life Science Applications



? FAQ

What type of material should I look for in a filter?

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