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TECHSPEC® Dark Red M55.0 x 0.75 High Performance Machine Vision Filter

TECHSPEC® High Performance Mounted Machine Vision Filters

Stock **#89-831** CONTACT US

- 1 + **£270.40**

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Volume Pricing	
Qty 1-9	**£270.40** each
Qty 10+	**£248.80** each
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Prices shown are exclusive of VAT/local taxes

Product Downloads

General

Note:

OD ≥3.0 @ 720 - 1120nm
OD ≥4.0 @ 200 - 550nm

Type:

Mounted Imaging Filter

Physical & Mechanical Properties

Clear Aperture CA (mm):

50.5

Construction:
Mounted in Black Anodized Ring

Outer Diameter (mm):
57.00

Substrate Thickness (mm):
1.75 ±0.10

Physical Durability:
Adhesion per MIL-PRF-13830B, Section C.4.5.12
Moderate abrasion per MIL-PRF-13830B, Section C.4.5.11
Cleaning per MIL-C-48497A Section 4.5.4.2

Optical Properties

Blocking Wavelength Range (nm):
200-550, 720-1120

Coating:
Hard Coated

Color:
Dark Red

Center Wavelength CWL (nm):
660.00

Full Width-Half Max FWHM (nm):
66.00

Optical Density OD (Average):
≥3.0

Wavelength Range (µm):
0.2 - 1.2

Average Transmission (%):
≥90

Threading & Mounting

Filter Thread:
M55 x 0.75

Mount Thickness (mm):
4.8

Mount Thickness Including Threads (mm):
7.0

Environmental & Durability Factors

Environmental Durability:
Humidity per MIL-STD-810H, Section 507.6
Temperature per MIL-STD-810H, Section 501.7 and 502.7

Regulatory Compliance

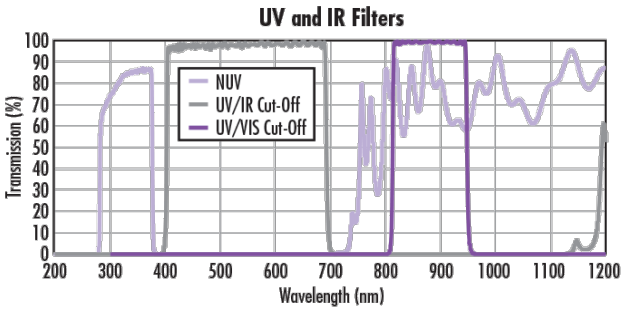
Certificate of Conformance:
View

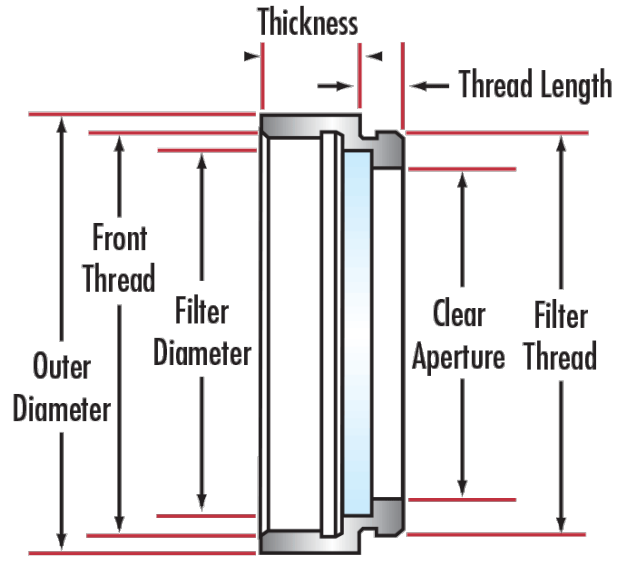
Product Details

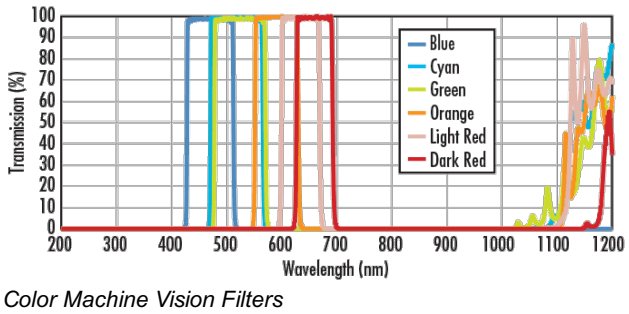
- Optimized for Use with Popular LEDs
- Multiple Mounting Sizes and Threads Available to Ease System Compatibility
- Extremely High and Flat Transmission Profiles Provide Even Illumination

TECHSPEC® High Performance Mounted Machine Vision Filters are designed and manufactured for the most demanding machine vision and imaging applications. These filters pass or block specific UV, visible, or IR wavelengths and provide extremely wide angles of incidence. Compared to traditional filters, these hard coated filters provide superior blocking of unwanted light and greater durability for longer lifetimes. TECHSPEC® High Performance Mounted Machine Vision Filters can be used to improve image contrast and isolate spectral regions and colors. These filters are offered in a variety of colors and filter thread sizes.

Technical Information





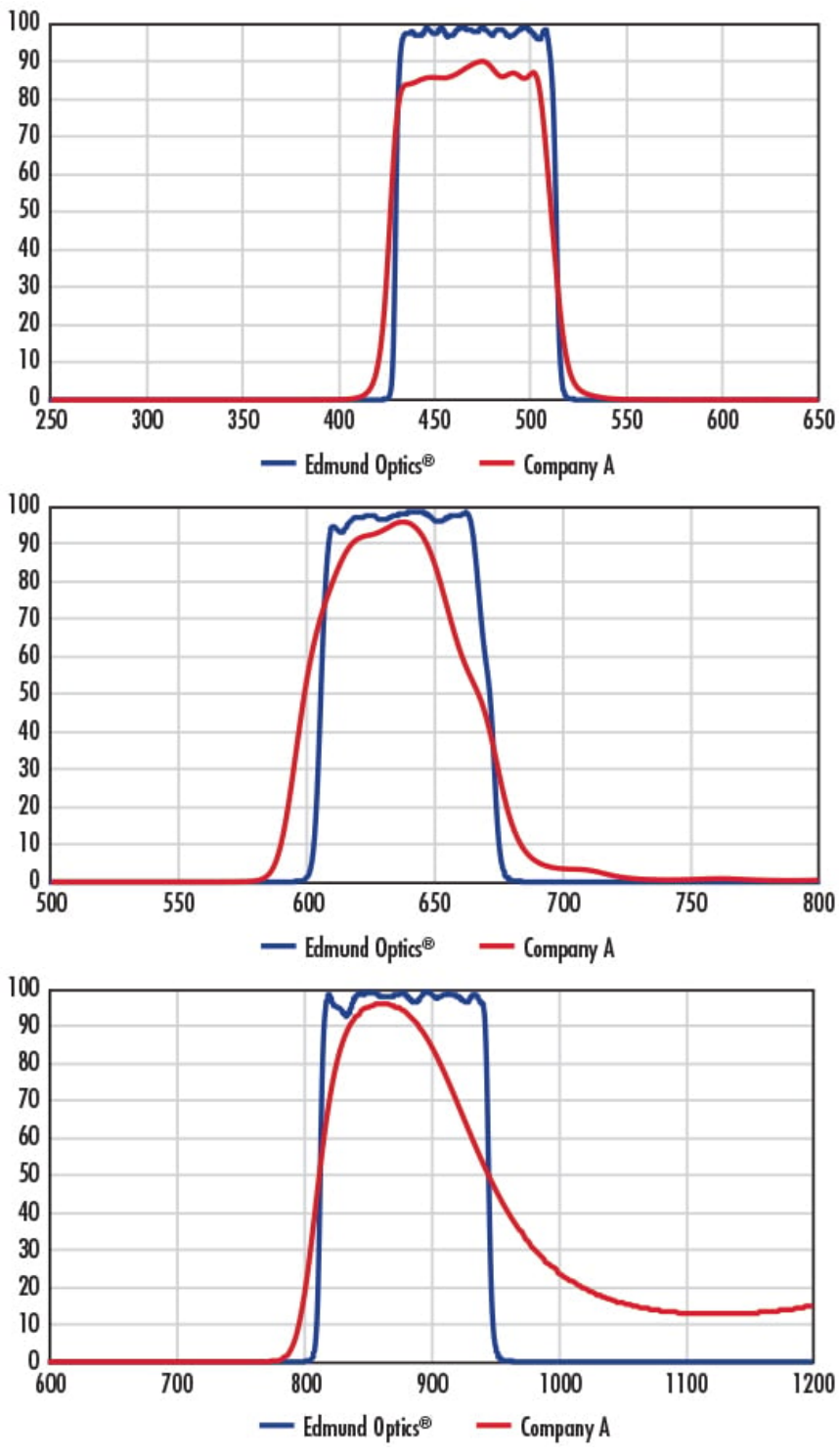


Color Machine Vision Filters

Edmund Optics® TECHSPEC® High Performance Machine Vision Filters are designed with the industry's best performance to cost ratio in mind. With extremely sharp edge transition and flat peak transmission, users are guaranteed the optimal signal-to-noise ratio in their imaging system without losing light intensity that is critical for performance.

On average, the blocking range reaches far into the UV at 200nm and stretches out to 1200nm, which covers most of the noise and UV/IR signatures seen in conventional lamps and bulbs.

The graphs below demonstrate the performance typical to our Machine Vision Filters and other Hard Coated filters. The sharp cut-on and cut-off wavelengths are noticeably apparent, as well as transmission values that are >10% improved over traditional imaging filters on the market.



Filter Thread	**Outer Diameter (mm)**	**Front Thread (to allow for stacking)**	**Filter Diameter (mm)**	**Thickness (mm)**	**Thread Length (mm)**	**Clear Aperture CA (mm)**
M22.5 x 0.50	24.5	M22.5 x 0.50	20.1 ±0.1	4.5	2.0	18.5
M25.5 x 0.50	27.5	M25.5 x 0.50	23.0 ±0.1	4.5	2.0	21.5
M30.5 x 0.50	32.0	M30.5 x 0.50	28.0 ±0.1	5.0	2.0	26.5

M34.0 x 0.50	36.0	M34.0 x 0.50	31.6 ±0.1	5.0	1.5	30.0
M35.5 x 0.50	37.0	M35.5 x 0.50	33.1 ±0.1	5.0	2.0	31.5
M40.5 x 0.50	42.0	M40.5 x 0.50	38.0 ±0.1	5.0	2.0	36.5
M43.0 x 0.75	45.0	M43.0 x 0.75	40.2 ±0.1	5.0	2.0	39.2
M46.0 x 0.75	48.0	M46.0 x 0.75	43.2 ±0.1	4.8	2.2	41.5
M55.0 x 0.75	57.0	M55.0 x 0.75	52.2 ±0.1	4.8	2.2	50.5
M62.0 x 0.75	65.0	M62.0 x 0.75	59.2 ±0.1	5.5	2.5	57.5

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