

# UV & IR Cut Filters



Call us for OEM versions

UV-cut filters are long pass filters that block the UV wavelength range and transmit the visible. These filters use an absorptive glass, which is robust, cost-effective and insensitive to angle of incidence. In machine vision applications they are used in front of a lens on a CCD or CMOS camera to protect the sensor from UV light, in absence of internal protection in the camera. In addition, they are often used to

protect expensive lenses from potential damage. The IR-cut filter is a short pass filter that blocks infrared light and transmits the visible; also based on an absorptive glass. The UV-IR cut filter is the combination of a UV cut and a IR cut in one single filter using a UV cut absorptive glass with a thin film layer system as an interference IR cut coating.

## Key Features

- Combined UV-IR cut filter in one to transmit visible range
- Cost-effective UV cut filters as lens protection
- Available in mounts with all common thread sizes

## Applications

- Machine Vision and other imaging applications
- Scientific & research measurement

## Technical Specifications<sup>1</sup>

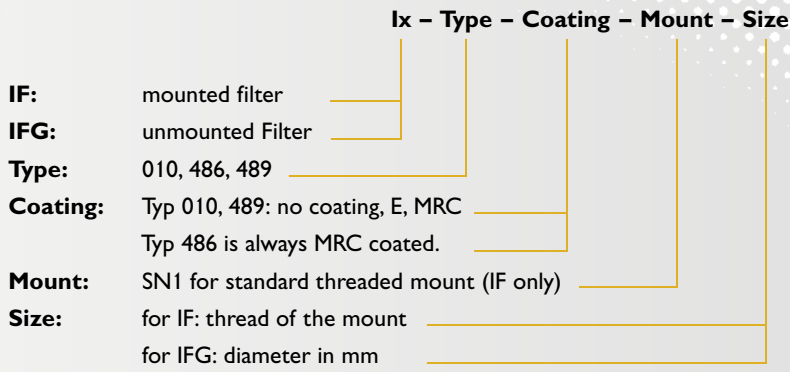
Filter Type:	010 UV cut	486 UV-IR cut	489 IR cut
Pass wavelength range:	> 365 nm ± 10 nm	390 ± 15 nm – 690 ± 20 nm	visible
Surface:	5/2 × 0.16 <sup>2</sup>	5/2 × 0.16 <sup>2</sup>	5/2 × 0.16 <sup>2</sup>
Wavefront distortion <sup>3</sup> :	1 λ	1 λ	1 λ
Parallelism:	1 arc minute	1 arc minute	1 arc minute
Diameter tolerance:	+ 0 - 0.3 mm	+ 0 - 0.3 mm	+ 0 - 0.3 mm
Thickness:	2.0 ± 0.2 mm	2.0 ± 0.2 mm	2.0 ± 0.2 mm

<sup>1</sup> Specifications for unmounted and uncoated versions

<sup>2</sup> Surface specification according to ISO 10110, quality usually similar to MIL 80-50 scratch-dig or better

<sup>3</sup> Per 30 mm at 633 nm

**ORDER INSTRUCTIONS:**



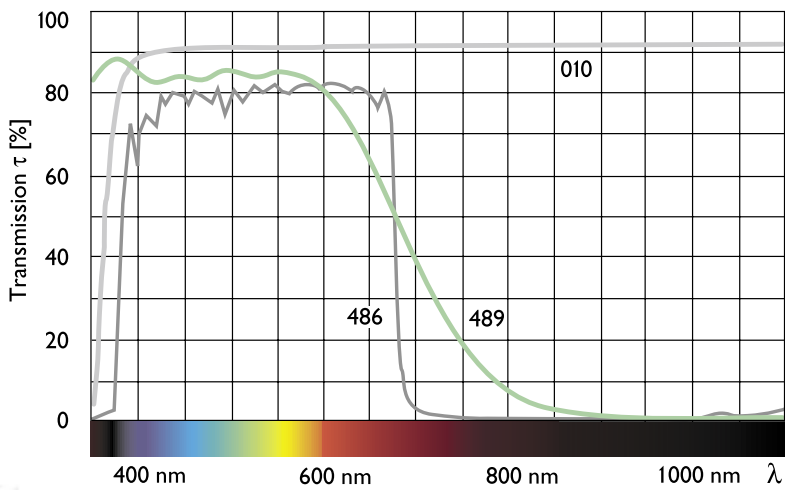
**Examples:**

IF – 010 – E – SN1 – 25.5

(010 filter with MgF<sub>2</sub> coating on both sides, mounted for M25.5)

IFG – 486 – 30

(unmounted 486 filter with 30 mm diameter)



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