

Red & Yellow Filters



Call us for OEM versions

Red and yellow filters are long-pass filters that pass light at wavelengths longer than their characteristic cut-on wavelength – typically the wavelength at which the transmission is 50% of the maximum. These filters use absorptive glasses, that are robust, cost-effective and insensitive to angle of incidence. In machine vision, one of their typical applications, they

are used in front of a lens on a monochrome CCD or CMOS camera to improve image contrast. The appropriate type of filter has to be selected with respect to the color of the object and the type and/or color of the illumination. These filters are available unmounted or in mounts with all common thread sizes.

Key Features

- Insensitive to angle of incidence
- Available in mounts with all common thread sizes
- Absence of vignetting due to large clear aperture

Applications

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

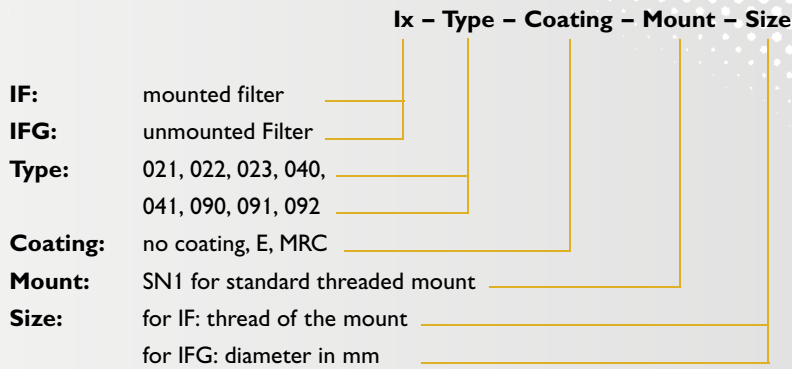
Technical Specifications ¹								
Filter Type:	021	022	023	040	041	090	091	092
	light yellow	med. yellow	dark yellow	yell.-orange	red-orange	light red	red	dark red
Cut-on wavelength:	460 nm	490 nm	530 nm	550 nm	565 nm	600 nm	625 nm	695 nm
Cut-on wavelength tolerance:	± 10 nm	± 10 nm	± 10 nm	± 10 nm	± 10 nm	± 10 nm	± 10 nm	± 10 nm
Surface:	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²	5/2 x 0.16 ²
Wavefront distortion ³ :	1 λ	1 λ	1 λ	1 λ	1 λ	1 λ	1 λ	1 λ
Parallelism:	1 arc minute	1 arc minute	1 arc minute	1 arc minute	1 arc minute	1 arc minute	1 arc minute	1 arc minute
Diameter tolerance:	+ 0 - 0.3 mm	+ 0 - 0.3 mm	+ 0 - 0.3 mm	+ 0 - 0.3 mm	+ 0 - 0.3 mm	+ 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	2.0 ± 0.2 mm	2.0 ± 0.2 mm	2.0 ± 0.2 mm	2.0 ± 0.2 mm	2.0 ± 0.2 mm

¹ Specifications for unmounted and uncoated versions

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

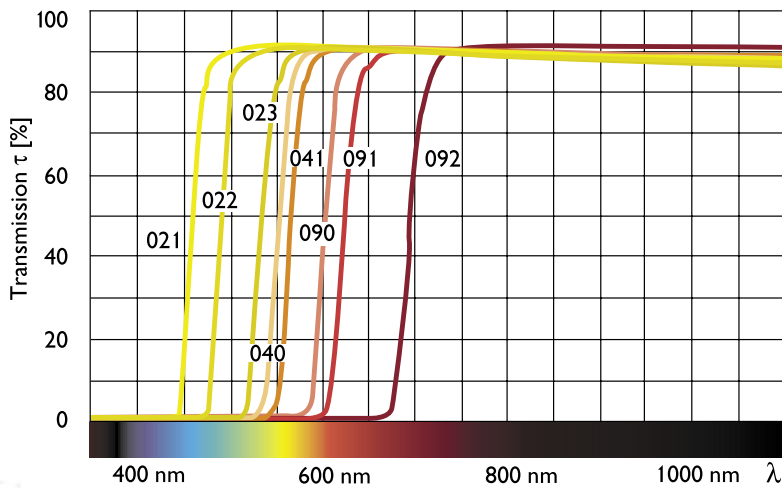
³ Per 30 mm at 633 nm

ORDER INSTRUCTIONS:



Examples:

- IF - 090 - E - SN1 - 25.5
(090 filter with MgF₂ coating on both sides, mounted for M25.5)
- IFG - 092 - 30
(unmounted 092 filter with no coating, 30 mm diameter)



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