

Anti-reflection Coatings

Call us for OEM versions

From any uncoated glass surface, about 4 to 9% of the light is reflected depending on the refractive index difference between air and the glass. The reflection of light not only causes a loss in intensity but also generates ghost images and stray light which reduce the image quality in an optical system. Schneider Kreuznach offers the choice of several different types of anti-reflection (AR) coatings that minimize the residual reflection per surface. All filters are available with no coating, with a standard single layer MgF₂ coating for the visible wavelength range, or with Schneider's superior Multi Resistant Coating

(MRC). This coating is a broadband multilayer AR coating for the visible wavelength range that is hydrophobic and features an extreme high resistance to mechanical and environmental stress. Since this process is 'cold' it can be applied to heat-sensitive materials such as plastic substrates or polarization filters based on polymer films cemented between protective glasses. In addition, custom specific special coatings are available, e.g. V-coatings that have extremely low residual reflectivity at the optimized wavelength.

Key Features

- Standard AR coating based on MgF₂
- Superior MRC coating, suitable also for heat-sensitive materials
- Custom V-coatings

Applications

- High quality filters for imaging applications
- High performance lenses thanks to low stray light
- Optimization of optical imaging systems

Technical Specifications			
Coating Type:	E Single layer MgF ₂	MRC Broadband multilayer	V _{xxx} V-coating
Wavelength range:	380 nm – 850 nm	400 nm – 680 nm	optimized at wavelength xxx
Residual reflectivity:	1.3 % ¹	0.5 % ²	0.2 % ³

¹ At $\lambda=525$ nm, for refractive index of substrate $n=1.52$

² For $420 \text{ nm} < \lambda < 640 \text{ nm}$; 1% for full range

³ For optimized wavelength

ORDER INSTRUCTIONS:

lx – Type – Coating – Mount – Size

IF: mounted filter _____
IFG: unmounted Filter _____
Type: see datasheets for _____
 Schneider filters _____
Coating: E, MRC, Vxxx (specify optimized wavelength as xxx nm) _____
Mount: (IF only): see datasheet for mounts _____
Size: for IF: thread of the mount _____
 for IFG: diameter in mm _____

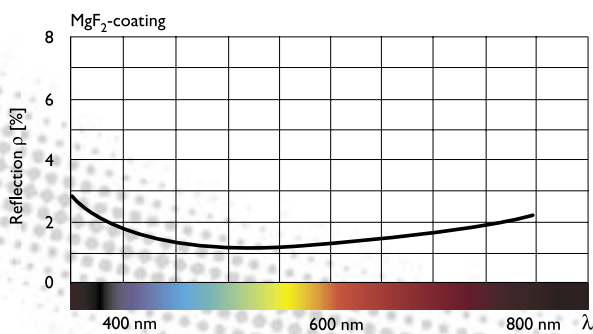
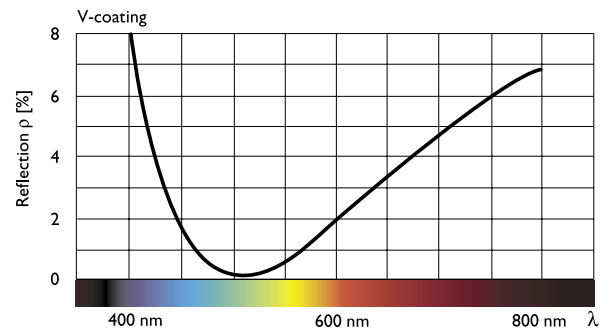
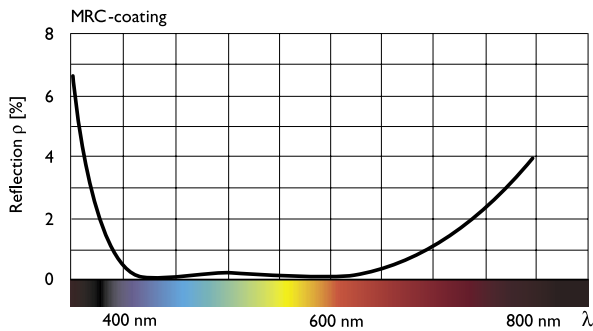


Examples:

IF – 010 – MRC – SN1 – 25.5 (Schneider filter 010 with MRC coating, mounted for M25.5)

IFG – 093 – V875 – 30 (unmounted Schneider filter 093 with V-coating optimized for 875 nm, 30 mm diameter)

Please ask us for coatings on any other substrate to be provided.



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