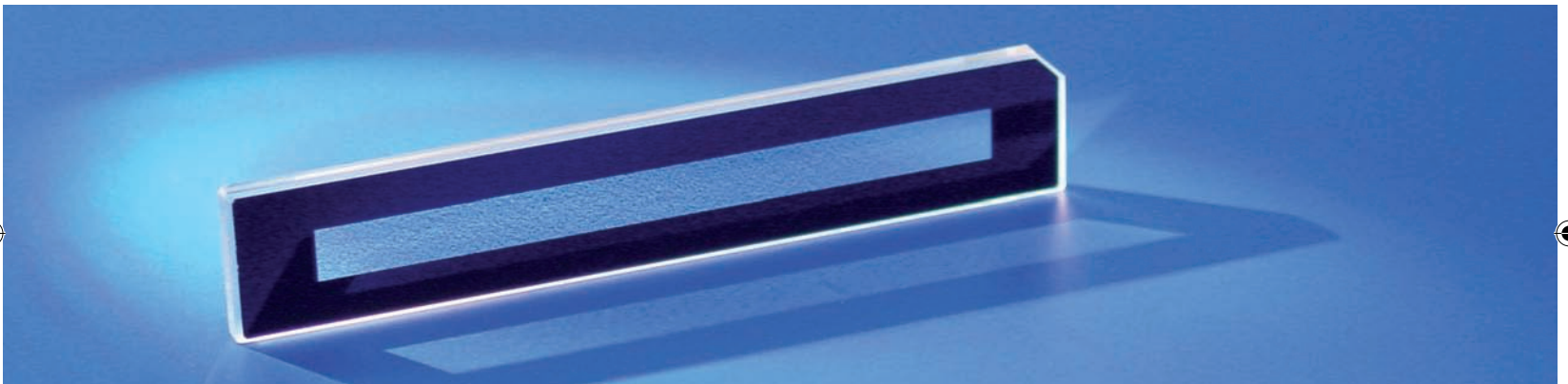




Digital Neutral Density Filters



Jenoptik offers Digital Neutral Density Filters for precise transmission control.

Digital neutral density filters contain well-defined metal absorber microstructures that are randomly distributed on a fused silica substrate. Density and size of the structures can be customized to meet precisely the transmission profile required by the application.

Individual Digital Neutral Density Filters according to customers requirements can be supplied within two weeks.

Features:

- Well-defined 1- or 2-dimensional transmission profiles
- High accuracy of transmission
- High damage threshold
- Broadband attenuation for DUV to IR wavelengths
- Large clear aperture
- Optional AR coating with excellent homogeneity
- Custom designs with short delivery time

Applications:

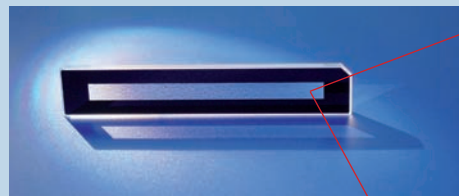
- Precise correction of intensity profiles in illumination or projection systems
- Compensation for transmission profiles of individual optical systems
- Variable attenuation filters for high-power lamps and expanded lasers beams
- Soft edge apertures

Digital Neutral Density Filters

Specifications

Transmission:	0 % up to 99 % with AR-Coating
Tolerance of transmission:	Down to ± 0.2 % peak-to-valley
Wavelengths:	193 nm to 2.5 μm , mono- or polychromatic light
Substrate material:	Fused Silica
Absorbers:	Precise, randomly distributed metal micro-structures
Dimensions:	5 mm x 5 mm to 178 mm x 178 mm
Thickness:	6.35 mm, 3.05 mm or 2.30 mm
Clear aperture:	< 160 mm x 160 mm
Alignment:	Passive alignment with precision edge (± 0.02 mm) alignment marks (± 0.0001 mm) on request
AR-Coating:	Coatings for different UV, VIS or NIR wavelengths
Mounting:	Optional, assemblies with other optics available
Product number:	029100

Detail of a digital neutral density filter.



Microscopic view of a Digital Neutral Density Filter with metal micro absorbers.



It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.



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