## **Neutral Density ND 0.9**



ND filters reduce evenly the transmittance of light over the entire VIS spectrum. They decrease the brightness of an image without changing the depth of field (DoF). They attenuate light by absorbing a part of the energy of the VIS wavelength, without influence on the color balance. ND filters are used to control the intensity of light going through an optical system to avoid overexposure, blooming on imaging sensors and prevent damages on light sensitive measuring sensors.

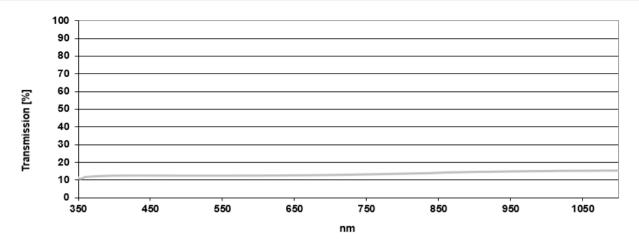


Key features	Applications
Insensitive to angle of incidence	• Welding
<ul> <li>Decrease brightness without changing DoF</li> </ul>	<ul> <li>Measuring Instruments</li> </ul>
<ul> <li>Stackable, combine ND-filters to achieve OD</li> </ul>	• R&D
<ul> <li>Even attenuate avoid effects on color balance</li> </ul>	Laser Measurement

Standard Products		available on request	
Name	Description	Name	Description
ND 0.6	OD 0.6	ND 102	OD 0.6
ND 0.9	OD 0.9	ND 103	OD 0.9
ND 1.8	OD 1.8		OD 1.8
ND 3.0	OD 3.0		OD 3.0

# **Neutral Density ND 0.9**





Technical specifications	according to ISO 10110
Optical density	0.9
Transmittance average	12.5 %
Glass thickness	1.3 +/- 0.2 mm

Mounted Inc	dustrial Filter	[IF]	(	Unmounted I	ndustrial Filterglass [IFG]
Mount	Thickness	ID	Diameter	Thickness	ID
CMT	1.3mm	1105602	22.0 mm	1.3mm	ID to be defined
SH 25.5	1.3mm	1105506	23.0 mm	1.3mm	ID to be defined
SH 27.0	1.3mm	1105600	24.0 mm	1.3mm	ID to be defined
SN1 30.5	1.3mm	ID to be defined	29.0 mm	1.3mm	ID to be defined
SH 34.0	1.3mm	1107089	31.0 mm	1.3mm	ID to be defined
SH 35.5	1.3mm	1107090	33.0 mm	1.3mm	1088959
SH 37.0	1.3mm	1105509	34.0 mm	1.3mm	1089306
SH 39.0	1.3mm	1107091	36.0 mm	1.3mm	1088960
SH 40.5	1.3mm	1107093	38.0 mm	1.3mm	1088961
SH 43.0	1.3mm	1107094	40.0 mm	1.3mm	1088962
SH 46.0	1.3mm	1107095	43.0 mm	1.3mm	1088963
SH 49.0	1.3mm	1107096	46.0 mm	1.3mm	1088964

Custom sizes available on request.

#### Order nomenclature

IF 803 [Mount] [Thickness] Example: IF 803 SH 25.5 1.3 IFG 803 [Diameter] [Thickness] Example: IFG 803 23.0 1.3



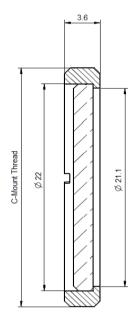
#### C-Mount

Defined by 1" (25.4mm) diameter and 32 turns per inch pitch, the C-Mount thread is a popular camera mount in machine vision industry. Schneider-Kreuznach offers a CMT mount option for most filters. So filters fit in any C-Mount based mechanics, including the C-Mount thread of a camera. The extension of the back flange distance has to be considered for imaging applications.

### Key features **Applications**

- Fits in C-Mount cameras
- Robust
- Black anodized brass
- Mounted in C-Mount camera threads
- In vision systems based on C-Mount mechanics

Thread	Diameter	Clear Aperture	Thickness
1'' - 32	25.4 mm	21.1 mm	3.6 mm



#### SH-Mount

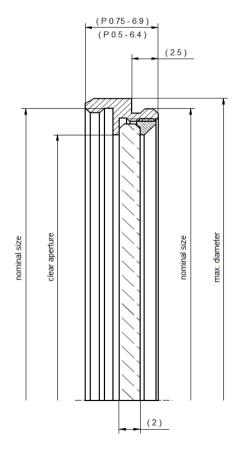
SH-Mount is the standard thread mount when high flexibility and stability is required. The filter glass is hold in place by a retainer ring. SH-Mounts are extremely robust, have a female and male M-thread and can be stacked if several filters must be combined.

Key features	Applications

- Stackable
- Robust
- Black anodized brass
- Mounted on lenses
- Mounted on measurement instruments

Thread	Diameter	Diameter Clear Aperture	
M 25.5x0.5	29.5 mm	20.8mm	6.4 mm
M 27.0x0.5	31.0 mm	21.8 mm	6.4 mm
M 35.5x0.5	39.5 mm	29.8 mm	6.4 mm
M 37.0x0.75	41.0 mm	31.8 mm	6.9 mm
M 39.0x0.5	43.0 mm	33.8 mm	6.4 mm
M 40.5x0.5	44.5 mm	35.8 mm	6.4 mm
M 43.0x0.75	47.0 mm	37.8 mm	6.9 mm
M 46.0x0.75	50.0 mm	40.8 mm	6.9 mm
M 49.0x0.75	53.0 mm	43.8 mm	6.9 mm
M 52.0x0.75	56.0 mm	46.8 mm	6.9 mm
M 55.0x0.75	59.0 mm	49.8 mm	6.9 mm
M 58.0x0.75	62.0 mm	52.8 mm	6.9 mm
M 62.0x0.75	66.0 mm	56.8 mm	6.9 mm
M 67.0x0.75	71.0 mm	61.8 mm	6.9 mm

UV/IR Cut 380 - 650 nm



© Jos. Schneider Optische Werke GmbH | 06/2023 | Jos. Schneider Optische Werke GmbH is certified ISO 9001. We accept no responsibility for any errors and reserve the right of modification without further notice.

### **Mounts**



#### **SN1-Mount**

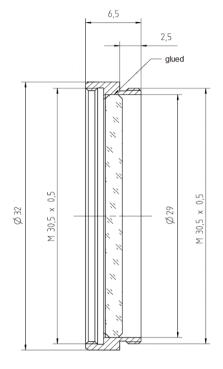
The SN1-Mount was designed for the popular M30.5x0.5 thread. With its high clear aperture, vignetting can be avoided even for wide angle applications. The filter is glued into the mount. So it is secured against vibrations when integrated into robots or production lines. It is ideal to be used in automated fabrication. SN1-Mounts have a male and female Mthread and can be stacked if several filters must be combined.

Key features	Applications
--------------	--------------

• Mounted on measurement

instruments

- Maximum clear aperture Mounted on lenses
- No vignetting
- Stackable
- Robust
- Black anodized brass
- Clear **Thread Thickness** Diameter **Aperture** M 30.5x0.5 32 mm 28 mm 6.5 mm



## Contact



#### Headquarters Europe

Jos. Schneider Optische Werke GmbH Ringstraße 132 55543 Bad Kreuznach +49 671 601 205 isales@schneiderkreuznach.com www.schneiderkreuznach.com

#### Offices Worldwide

#### America

+1 800 645 7239 (East Coast) +1 800 228 1254 (West Coast) info@schneideroptics.com

#### Asia

+86 755 8832 1170 info@schneider-asiapacific.com