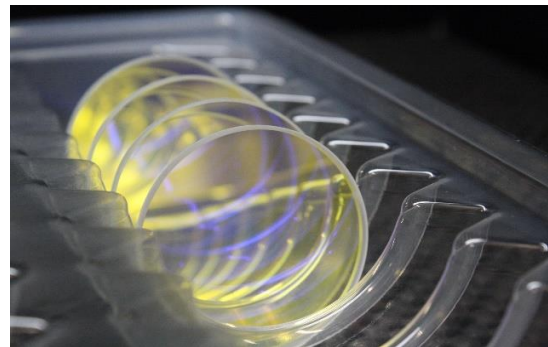


# Shortpass Filters



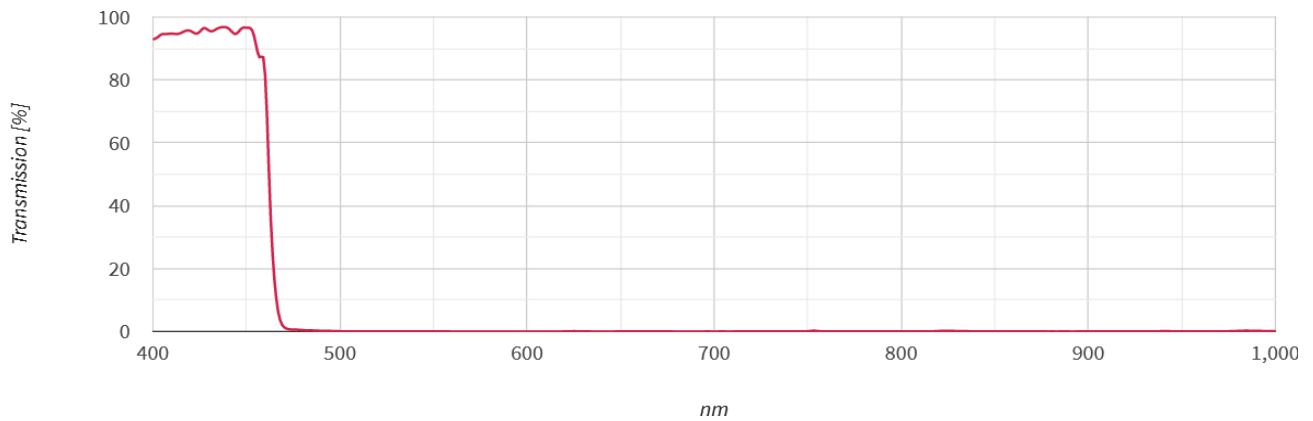
Schneider-Kreuznach magnetron sputtered industrial shortpass filters impress with steep slopes and high transmission at stable cut-off wavelengths. The very flat surface makes them ideal for high end machine vision systems in factory automation. Schneider-Kreuznach shortpass filters are RoHS con-form. Custom sizes are available on request.



Key features	Applications
<ul style="list-style-type: none"> <li>• Average Transmittance 95%</li> <li>• Steep Slopes</li> <li>• Wavelength Tolerance +/- 1%</li> <li>• Ultra Low Refelction</li> <li>• Deep Blocking / High OD</li> </ul>	<ul style="list-style-type: none"> <li>• Metrology</li> <li>• 3D Measurement</li> <li>• Food and beverage inspection</li> <li>• Automotive</li> <li>• Security / Surveillance</li> </ul>

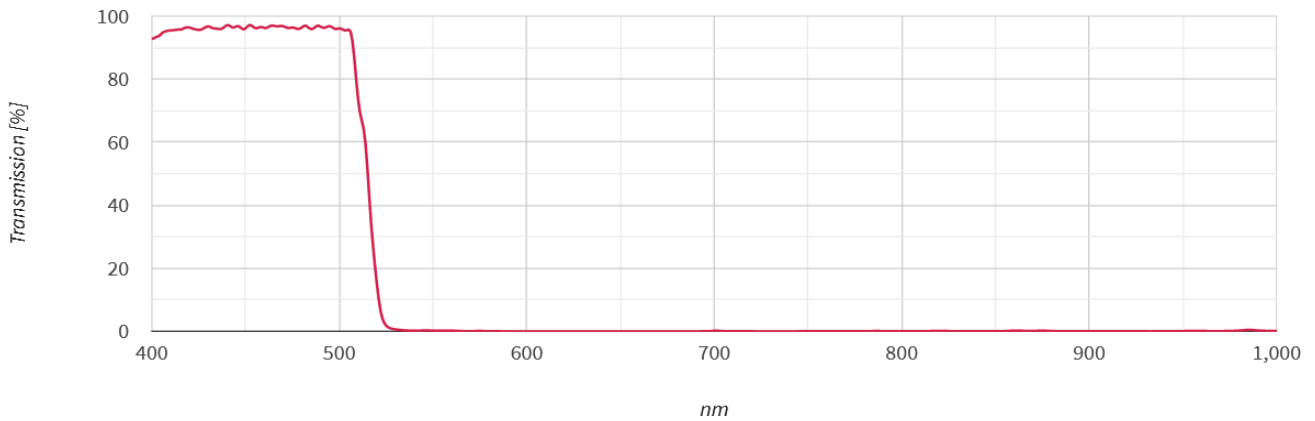
Standard Products		available on request	
Name	Description	Name	Description
SP 700 (489)	IR Cut < 750 nm	SP 460 HT	Shortpass < 460 nm
		SP 515 HT	Shortpass < 515 nm
		SP 615 HT	Shortpass < 615 nm
		SP 730 HT	Shortpass < 730 nm
		SP 760 HT	Shortpass < 760 nm
		SP 790 HT	Shortpass < 790 nm
		SP 850 HT	Shortpass < 850 nm

# Shortpass 460 HT - on request



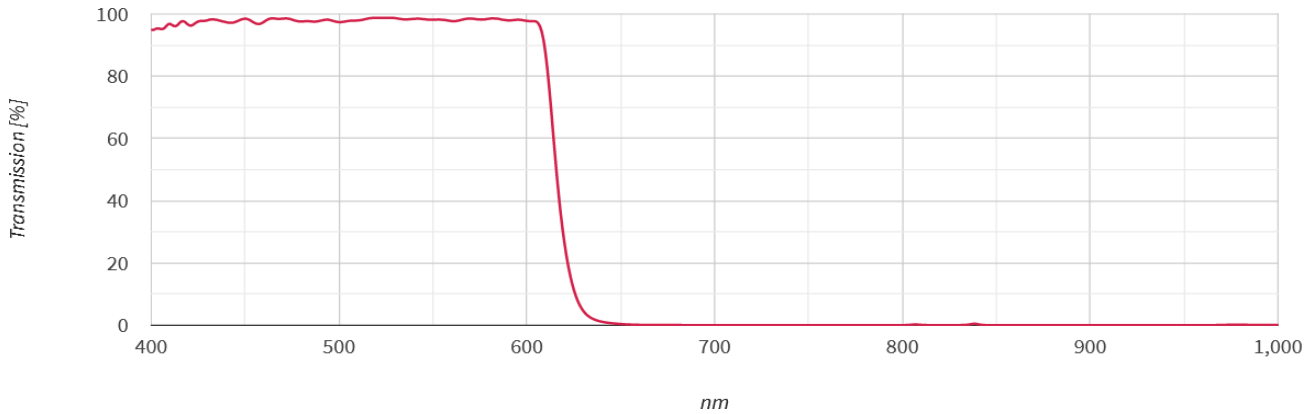
Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	460 +/- 5 nm
Transmittance	400 - 450 nm: $T_{abs} > 90\%$
Blocking	480 - 1000 nm: $T_{abs} < 1.0\%$
	1000 - 1090 nm: $T_{abs} < 3.0\%$
Parallelism	1'
Wavefront distortion	Ø > 18 - 30 mm: 13/ 1(0.25)
	Ø > 30 - 50 mm: 13/ 1(0.30)

# Shortpass 515 HT - on request



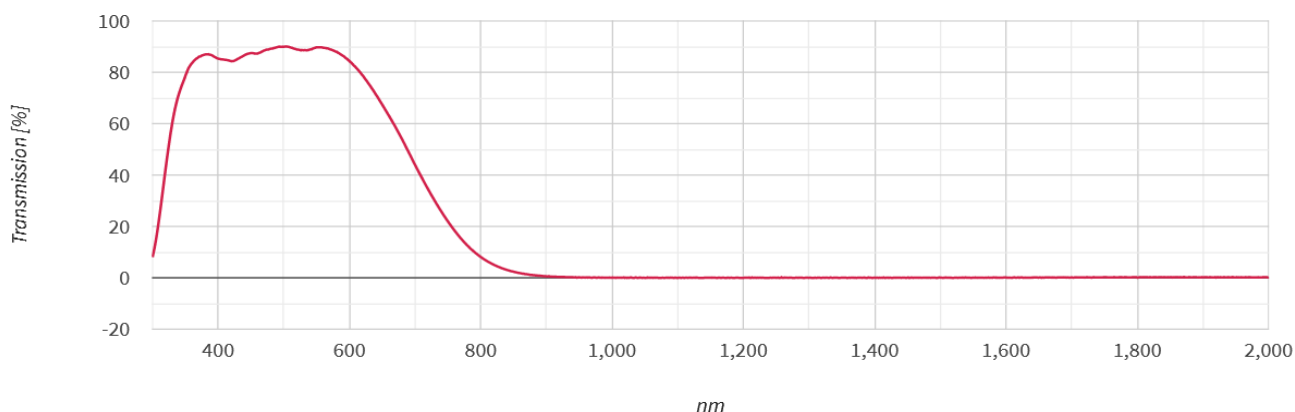
Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	515 +/- 6 nm
Transmittance	410 - 500 nm: $T_{abs} > 90\%$
Blocking	5320 - 1100 nm: $T_{abs} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø >18 - 30 mm: 13/ 1(0.25)
	Ø >30 - 50 mm: 13/ 1(0.30)

# Shortpass 615 HT - on request



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	615 +/- 6 nm
Transmittance	400 - 600 nm: $T_{abs} > 90\%$
	410 - 600 nm $T_{ave} > 95\%$
Blocking	650 - 1000 nm: $T_{abs} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø >18 - 30 mm: 13/ 1(0.25)
	Ø >30 - 50 mm: 13/ 1(0.30)

# Shortpass 700 (489)



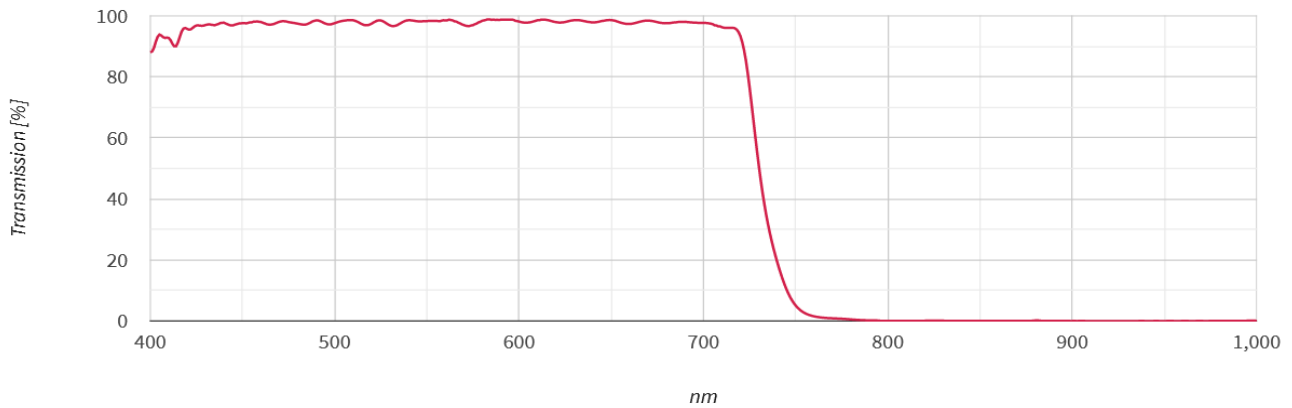
Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	700 +/- 10 nm
Transmittance	365 - 600 nm: $T_{ave} > 85\%$
Blocking	< 300 nm $T_{ave} < 1.0\%$
	> 880nm $T_{ave} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø > 18 - 30 mm: 13/ 1(0.25)
	Ø > 30 - 50 mm: 13/ 1(0.30)
Glass Thickness	2.0 +/- 0.2mm

Mounted Filter			Unmounted Filterglass		
IF 489 E Mount Thickness			IFG 489 E Diameter thickness		
Mount	Thickness	ID	Diameter	Thickness	ID
CMT	2mm	1071395	22.0 mm	2mm	ID to be defined
SH 25.5	2mm	1006975	23.0 mm	2mm	ID to be defined
SH 27.0	2mm	1006976	24.0 mm	2mm	ID to be defined
SN1 30.5	2mm	1009034	29.0 mm	2mm	ID to be defined
SH 34.0	2mm	ID to be defined	31.0 mm	2mm	ID to be defined
SH 35.5	2mm	1059342	33.0 mm	2mm	ID to be defined
SH 37.0	2mm	1006978	34.0 mm	2mm	1071870
SH 39.0	2mm	1019705	36.0 mm	2mm	1086193
SH 40.5	2mm	1001903	38.0 mm	2mm	ID to be defined
SH 43.0	2mm	1011903	40.0 mm	2mm	1085718
SH 46.0	2mm	1011904	43.0 mm	2mm	ID to be defined
SH 49.0	2mm	1007828	46.0 mm	2mm	ID to be defined

Custom sizes are available on request.  
Example: IF 489 E SH 25.5 2

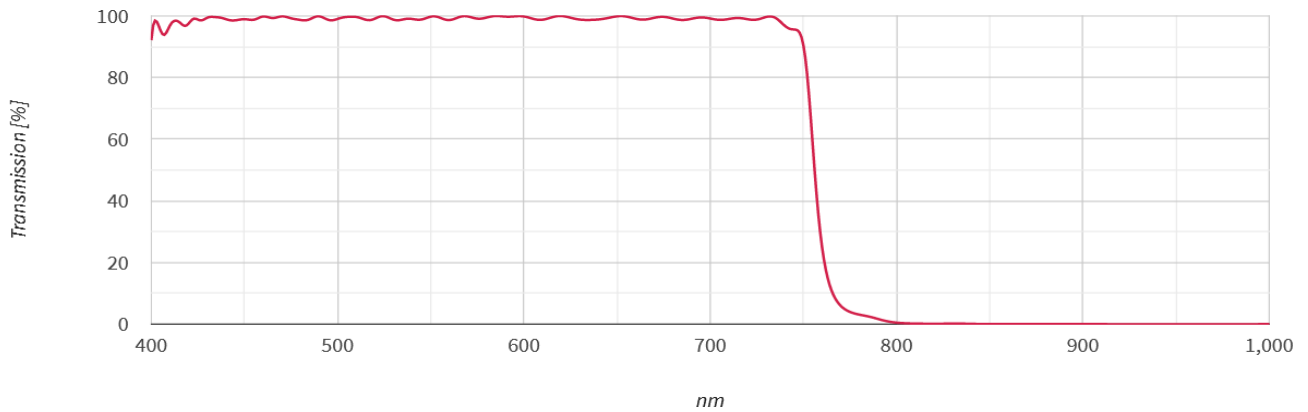
Custom sizes are available on request.  
Example: IFG 489 E 23.0 2

# Shortpass 730 HT - on request



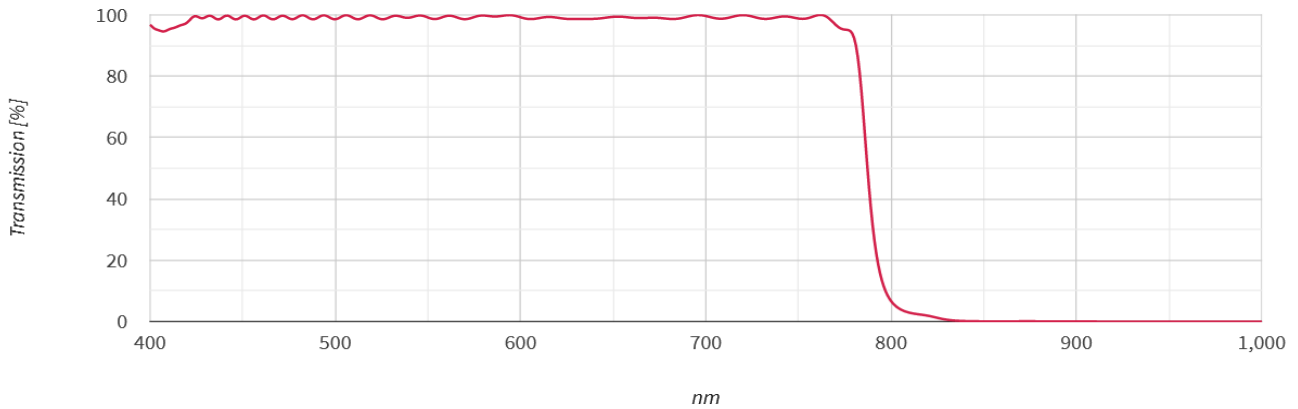
Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	730 +/- 7 nm
Transmittance	425 - 710 nm: $T_{abs} > 90\%$
	425 - 710 nm: $T_{ave} > 95\%$
Blocking	780 - 1100 nm: $T_{abs} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø >18 - 30 mm: 13/ 1(0.25)
	Ø >30 - 50 mm: 13/ 1(0.30)

# Shortpass 760 HT - on request



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	760 +/- 8 nm
Transmittance	420 - 745 nm: $T_{abs} > 90\%$
	420 - 745 nm: $T_{ave} > 95\%$
Blocking	810 - 1100 nm: $T_{abs} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø >18 - 30 mm: 13/ 1(0.25)
	Ø >30 - 50 mm: 13/ 1(0.30)

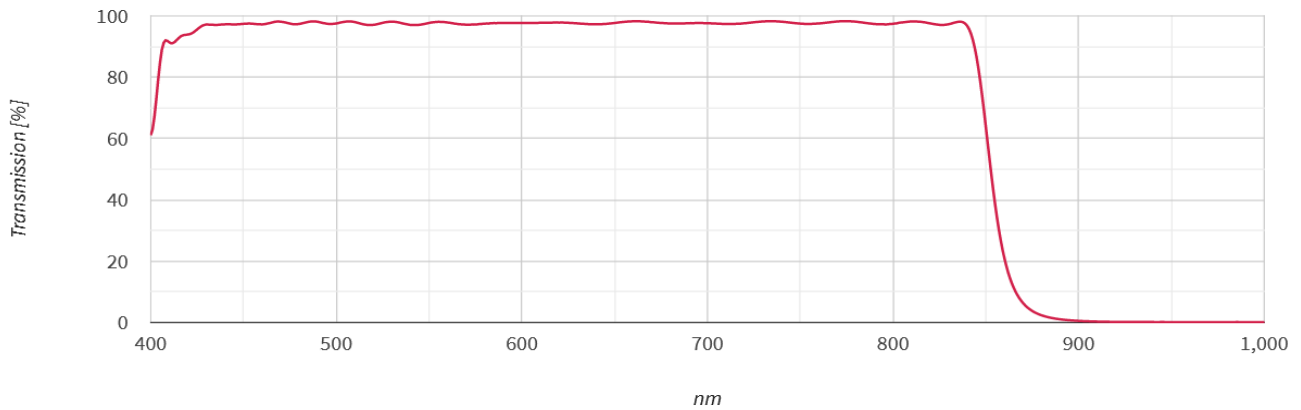
# Shortpass 790 HT - on request



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	790 +/- 8 nm
Transmittance	425 - 775 nm: $T_{abs} > 90\%$
	425 - 775 nm: $T_{ave} > 95\%$
Blocking	840 - 1050 nm: $T_{abs} < 1.0\%$
	1050 - 1100 nm: $T_{abs} < 2.0\%$
Parallelism	1'
Wavefront distortion	Ø >18 - 30 mm: 13/ 1(0.25)
	Ø >30 - 50 mm: 13/ 1(0.30)



# Shortpass 850 HT - on request



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-off wavelength	850 +/- 8 nm
Transmittance	425 - 830 nm: $T_{abs} > 90\%$
	425 - 830 nm: $T_{ave} > 95\%$
Blocking	900 - 1100 nm: $T_{abs} < 1.0\%$
Parallelism	1'
Wavefront distortion	Ø > 18 - 30 mm: 13/ 1(0.25)
	Ø > 30 - 50 mm: 13/ 1(0.30)

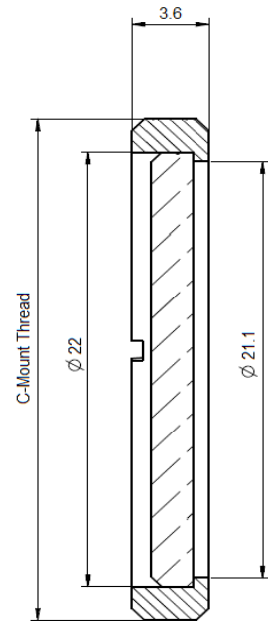
## C-Mount

Defined by 1" (25.4mm) diameter and 32 turns per inch pitch, C-Mount thread is a popular camera mount in machine vision industry. Schneider-Kreuznach offers for most filters a CMT mount option. So that filters can go in any C-Mount based mechanics in vision systems. Another popular application, CMT mounts can easily be used for, is placing a filter in front of the sensor into the camera. The extension of the back flange distance has to be considered for imaging applications.

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

- Fits in C-Mount cameras
- Black Anodized Brass
- To be mounted in C-Mount cameras
- Vision Systems based on C-Mount mechanics

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



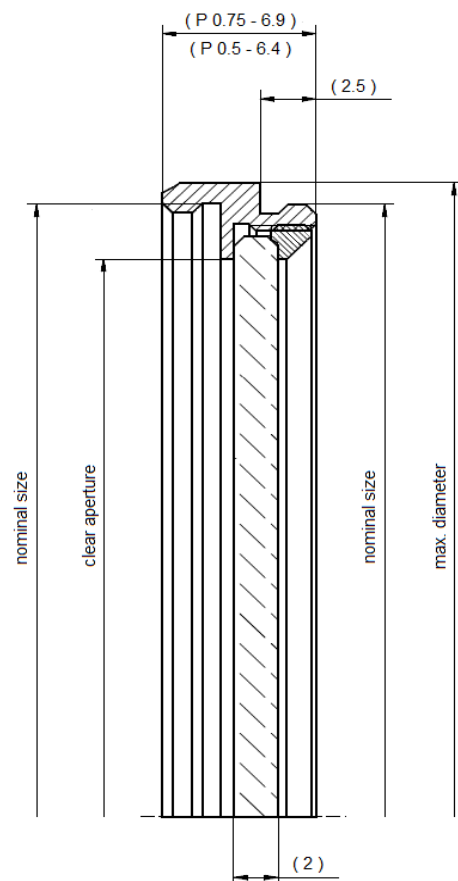
## SH-Mount

Schneider-Kreuznach offers a variety of mounts with common thread sizes to fit on most camera lens systems. SH-Mount is the standard, when high flexibility is needed. Filters are held by retainer rings. SH-Mounts are extreme robust. All SH-Mounts have a female M-thread, and can be stacked if several filters must be combined.

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

- Stackable
- Robust
- Black Anodized Brass
- Mounted on lenses in imaging applications
- Mounted on measurement instruments

Thread	Diameter	Clear Aperture	Thickness
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



## SN1-Mount

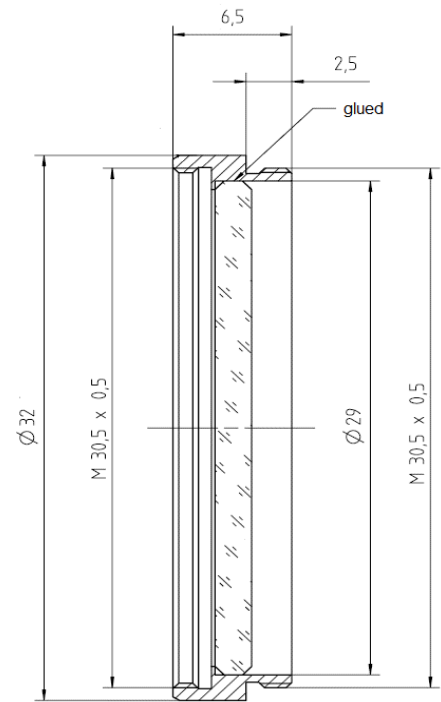
SN1-Mount was designed for in machine vision industry popular M30.5x0.5 thread. With its high clear aperture, vignetting can be avoided, even for wide angle applications. The filter is glued into the mount, in order to secure it against vibrations when integrated into robots or production lines. It is ideal to be used in automated fabrication.

SN1-Mounts have a male and female M-thread, and can be stacked if several filters must be combined.

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

- |                                                                                                                                                                            |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Maximum Clear Aperture</li> <li>• No vignetting</li> <li>• Stackable</li> <li>• Robust</li> <li>• Black Anodized Brass</li> </ul> | <ul style="list-style-type: none"> <li>• Mounted on lenses in imaging applications</li> <li>• Mounted on measurement instruments</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|

Thread	Diameter	Clear Aperture	Thickness
M 30.5x0.5	32 mm	28 mm	6.5 mm



## SN2-Mount

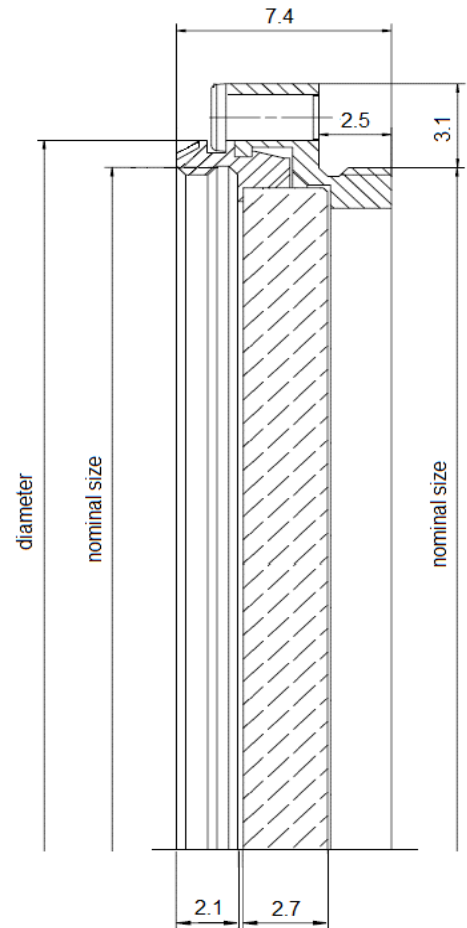
The SN2-Mount is designed for polarizers and achieves highest possible aperture, avoiding vignetting in machine vision systems. Its unique locking mechanism fixes the correct orientation, even in typical industrial environment. The filters are glued into the mount to secure them against vibrations when integrated into robots or production lines. Ideal to be used in automated fabrication.

SN2-Mounts have a female and male M-thread, and can be stacked if several filters must be combined.

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

- |                                                                                                                                                                                              |                                                                                                                                             |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Rotatable</li> <li>• High clear Aperture</li> <li>• No vignetting</li> <li>• Stackable</li> <li>• Robust</li> <li>• Black Anodized Brass</li> </ul> | <ul style="list-style-type: none"> <li>• Mounted on lenses in imaging applications</li> <li>• Mounted on measurement instruments</li> </ul> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|

Thread	Diameter	Clear Aperture	Thickness
M 25.5x0.5	27 mm	22.7 mm	7.4 mm
M 27.0x0.5	28.5 mm	23.7 mm	7.4 mm
M 30.5x0.5	32 mm	26.7 mm	7.4 mm
M 35.5 x0.5	37 mm	31.7 mm	7.4 mm
M 37.0x0.75	38.5 mm	32.7 mm	7.4 mm
M 40.5x0.5	42 mm	36.7 mm	7.4 mm
M 43.0x0.75	44.5 mm	37.7 mm	7.4 mm
M 46.0x0.75	47.5 mm	41.7 mm	7.4 mm
M 49.0x0.75	50.5 mm	44.7 mm	7.4 mm



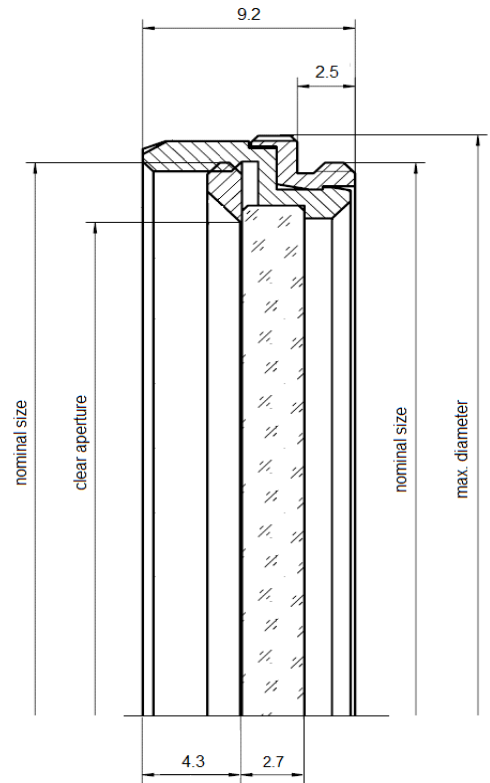
## DH-Mount

Schneider-Kreuznach offers a variety of mounts for polarizers with common thread sizes to fit on most camera lens systems. The DH-Mount is rotatable to adjust polarization axis in the required orientation. Filters are held by retainer rings. All DH-Mounts have a female and male M-thread and can be stacked if several filters must be combined.

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

- Rotatable
- Stackable
- Black Anodized Brass
- Mounted on lenses in imaging applications
- Mounted on measurement instruments

Thread	Diameter	Clear Aperture	Thickness
M 25.5x0.5	27 mm	20.8 mm	9.2 mm
M 27.0x0.5	28.5 mm	21.8 mm	9.2 mm
M 30.5x0.5	32 mm	25.8 mm	9.2 mm
M 35.5 x0.5	37 mm	30.8 mm	9.2 mm
M 37.0x0.75	38.5 mm	31.8 mm	9.2 mm
M 40.5x0.5	42 mm	35.8 mm	9.2 mm
M 43.0x0.75	44.5 mm	37.8 mm	9.2 mm
M 46.0x0.75	47.5 mm	40.8 mm	9.2 mm
M 49.0x0.75	50.5 mm	43.8 mm	9.2 mm
M 52.0x0.75	53.5 mm	46.8 mm	9.2 mm
M 55.0x0.75	56.5 mm	49.8 mm	9.2 mm
M 58.0x0.75	59.5 mm	52.8 mm	9.2 mm
M 62.0x0.75	63.5 mm	56.8 mm	9.2 mm
M 67.0x0.75	68.5 mm	61.8 mm	9.2 mm



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