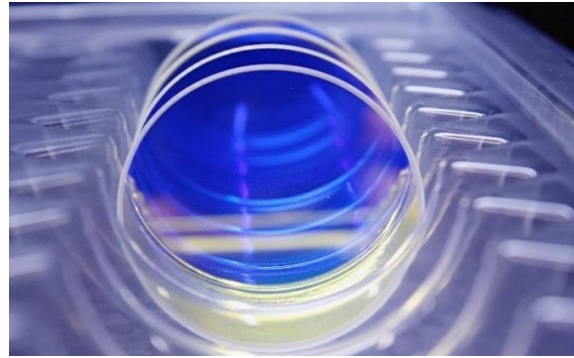


# Bandpass 635-50 HT



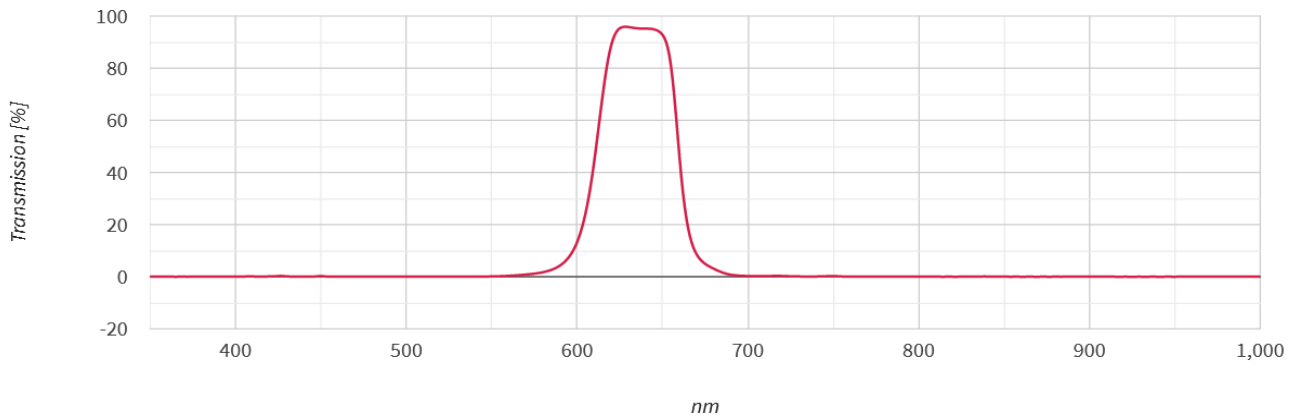
Schneider-Kreuznach magnetron sputtered industrial bandpass filters impress with steep slopes and high transmission at stable cut-on and cut-off wavelengths. The very flat surface makes them ideal for high end inspection systems. Schneider-Kreuznach bandpass filters are RoHS conform. Custom sizes are 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>• Deep blocking / High optical density</li> </ul>	<ul style="list-style-type: none"> <li>• Automation</li> <li>• 3D Measurement</li> <li>• Food and beverage inspection</li> <li>• Ophthalmology</li> <li>• Microscopy</li> <li>• Robotics</li> </ul>

Standard Products		available on request	
Name	Description	Name	Description
BP 465-70 HT	Bandpass 430 - 500 nm	BP 490-180 HT	Bandpass 400 - 580 nm
BP 540-80 HT	Bandpass 495 - 580 nm	BP 515-270 HT	UV/IR Cut 380 - 650 nm
BP 540-300 HT	UV/IR Cut 390 - 690 nm	BP 520-280 HT	UV/IR Cut 380 - 660 nm
BP 575-170 HT	Bandpass 495 - 660 nm	VIS-85 HT	400 - 650 nm & 800 - 900 nm
BP 590-50 HT	Bandpass 565 - 615 nm	BP 590-200 HT	Bandpass 595 - 690 nm
<b>BP 635-50 HT</b>	<b>Bandpass 610 - 660 nm</b>	BP 640-100 HT	Bandpass 590 - 590 nm
BP 660-60 HT	Bandpass 630 - 690 nm	BP 680-100 HT	Bandpass 630 - 730 nm
BP 850-80 HT	Bandpass 810 - 890 nm		
BP 865-100 HT	Bandpass 815 - 915 nm		

# Bandpass 635-50 HT



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-on wavelength	610 +/- 6 nm
Cut-off wavelength	660 +/- 7 nm
Transmittance	630 - 640 nm: $T_{abs} > 90\%$
Blocking	< 550 nm: $T_{abs} < 0.5\%$
	710 - 1050 nm: $T_{abs} < 1.0\%$
Wavefront distortion	∅ >18 - 30 mm: 13/ 1(0.25)   ∅ >30 - 50 mm: 13/ 1(0.30)
Parallelism	1'
Glass thickness tolerance	+/- 0.08mm

Mounted Industrial Filter [IF]			Unmounted Industrial Filterglass [IFG]		
Mount	Thickness	ID	Diameter	Thickness	ID
CMT	2mm	1085680	22.0 mm	2mm	1095000
CMT	1mm	1101098	22.0 mm	1mm	ID to be defined
SH 25.5	2mm	1084445	23.0 mm	2mm	ID to be defined
SH 25.5	1mm	On request only	23.0 mm	1mm	On request only
SH 27.0	2mm	1084641	24.0 mm	2mm	ID to be defined
SH 27.0	1mm	On request only	24.0 mm	1mm	On request only
SN1 30.5	2mm	1085091	29.0 mm	2mm	ID to be defined
SN1 30.5	1mm	On request only	29.0 mm	1mm	On request only
SH 34.0	2mm	1106744	31.0 mm	2mm	ID to be defined
SH 34.0	1mm	On request only	31.0 mm	1mm	On request only
SH 35.5	2mm	1085185	33.0 mm	2mm	ID to be defined
SH 35.5	1mm	On request only	33.0 mm	1mm	On request only
SH 37.0	2mm	1085816	34.0 mm	2mm	1082535
SH 37.0	1mm	On request only	34.0 mm	1mm	1101097
SH 39.0	2mm	1106745	36.0 mm	2mm	ID to be defined
SH 40.5	2mm	1084423	38.0 mm	2mm	ID to be defined
SH 43.0	2mm	1083606	40.0 mm	2mm	1097122
SH 46.0	2mm	1086649	43.0 mm	2mm	1082536
SH 49.0	2mm	1090632	46.0 mm	2mm	ID to be defined

Custom sizes available on request.

Order Nomenclature	
IF BP 635-50 HT [Mount] [Thickness] Example: IF BP 635-50 HT SH 25.5 2	IFG BP 635-50 HT [Diameter] [Thickness] Example: IFG BP 635-50 HT 23.0 2

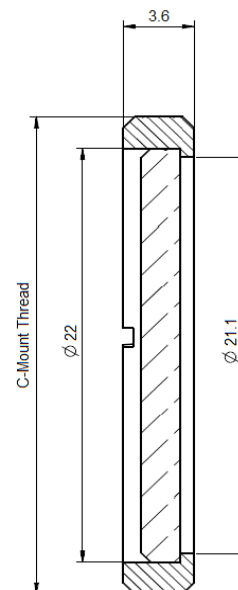
## C-Mount

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
--------------	--------------

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Fits in C-Mount cameras</li> <li>• Robust</li> <li>• Black anodized brass</li> </ul> | <ul style="list-style-type: none"> <li>• Mounted in C-Mount camera threads</li> <li>• In vision systems based on C-Mount mechanics</li> </ul> |
|---|---|

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



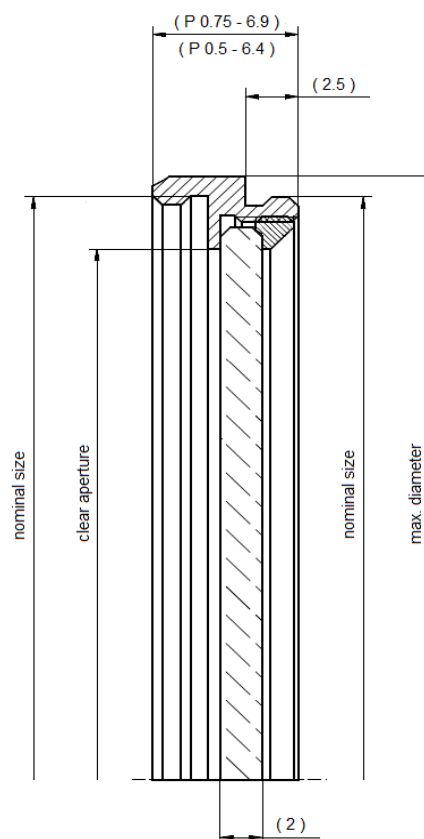
## SH-Mount

SH-Mount is the standard thread mount when high flexibility and stability is required. The filter glass is held 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
--------------	--------------

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li>• Stackable</li> <li>• Robust</li> <li>• Black anodized brass</li> </ul> | <ul style="list-style-type: none"> <li>• Mounted on lenses</li> <li>• Mounted on measurement instruments</li> </ul> |
|---|---|

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

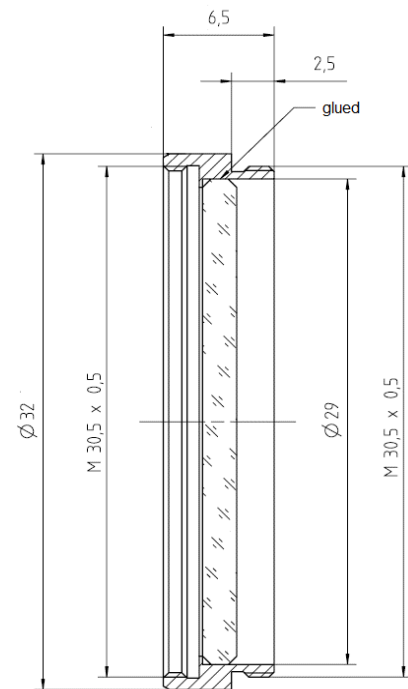


## SN1-Mount

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 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</li> <li>• Mounted on measurement instruments</li> </ul>

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



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