

# Longpass 820 HT



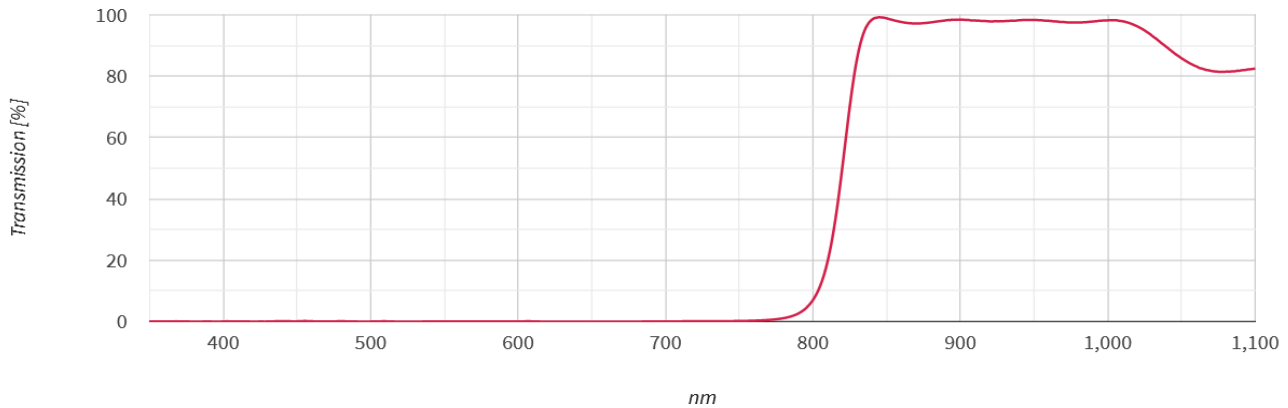
Schneider-Kreuznach magnetron sputtered industrial longpass filters impress with steep slopes and high transmission at stable cut-on wavelengths. The very flat surface makes them ideal for high end machine vision systems in factory automation. All longpass filters come with superior antireflection coating. Schneider-Kreuznach longpass 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 of interference filters +/- 1%</li> <li>• Ultra low reflection</li> <li>• Deep blocking / High optical density</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 and surveillance</li> </ul>

Standard Products		available on request	
Name	Description	Name	Description
LP 365 E	absorption filter - UV-Cut >365 nm	LP 400 HT	Longpass > 400 nm
LP 430 HT	Longpass > 430 nm	LP 460 HT	Longpass > 460 nm
LP 600 E	absorption filter - Light Red	LP 495 HT	Longpass > 495 nm
LP 625 E	absorption filter - Red	LP 515 HT	Longpass > 515 nm
LP 695	absorption filter - Dark Red	LP 530 HT	Longpass > 530 nm
LP 765 HT	Longpass > 765 nm	LP 565 HT	Longpass > 565 nm
LP 775	absorption filter - NIR Pass	LP 590 HT	Longpass > 590 nm
<b>LP 820 HT</b>	<b>Longpass &gt; 820 nm</b>	LP 610 HT	Longpass > 610 nm
LP 825	absorption filter - Black Red	LP 630 HT	Longpass > 630 nm
LP 900 HT	Longpass > 900 nm	LP 695 HT	Longpass > 695 nm
		LP 725 HT	Longpass > 725 nm
		LP 780 HT	Longpass > 780 nm
		LP 850 HT	Longpass > 850 nm

# Longpass 820 HT



Technical specifications	according to ISO 10110
Angle of incident	0° +/- 8°
Cut-on wavelength	820 +/- 8 nm
Transmittance	> 840 - 1010 nm: T <sub>abs</sub> > 90% > 840 - 1010 nm: T <sub>ave</sub> > 95%
Blocking	< 760 nm: T <sub>abs</sub> < 0.5%
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	1090467	22.0 mm	2mm	ID to be defined
CMT	1mm	ID to be defined	22.0 mm	1mm	ID to be defined
SH 25.5	2mm	1087228	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	1086965	24.0 mm	2mm	1086725
SH 27.0	1mm	On request only	24.0 mm	1mm	On request only
SN1 30.5	2mm	1088115	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	1106994	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	1090486	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	1085793	34.0 mm	2mm	1084183
SH 37.0	1mm	On request only	34.0 mm	1mm	ID to be defined
SH 39.0	2mm	1106995	36.0 mm	2mm	ID to be defined
SH 40.5	2mm	1090151	38.0 mm	2mm	ID to be defined
SH 43.0	2mm	1091456	40.0 mm	2mm	ID to be defined
SH 46.0	2mm	1086642	43.0 mm	2mm	1084184
SH 49.0	2mm	1091457	46.0 mm	2mm	ID to be defined

Custom sizes available on request.

Order nomenclature	
IF LP 820 HT [Mount] [Thickness] Example: IF LP 820 HT SH 25.5 2	IFG LP 820 HT [Diameter] [Thickness] Example: IFG LP 820 HT 23.0 2

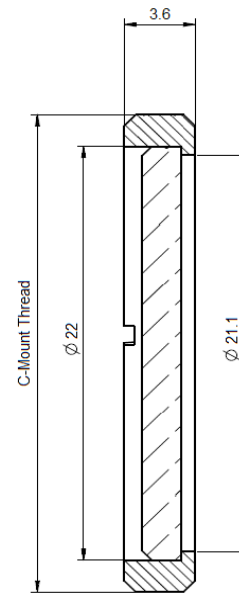
## C-Mount

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
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- |   |   |
|---|---|
| <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

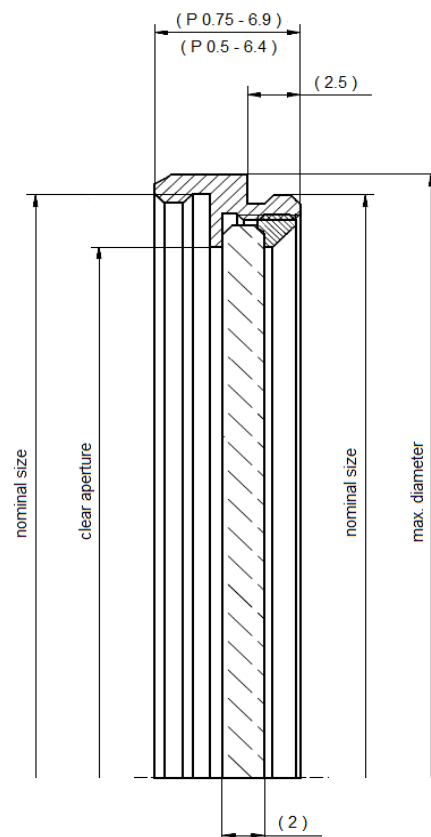
SH-Mount is the standard thread mount when high flexibility and stability is required. The filter glass is held in place by a retainer ring. SH-Mounts are extremely robust, have a female and male M-thread and can be stacked if several filters must be combined.

Key features	Applications
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- |   |   |
|---|---|
| <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

UV/IR Cut 380 - 650 nm



## 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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