Polarizers

Schneider Kreuznach polarizers are designed to fulfill industrial requirements. They are made of dichroic laminated polarizing polymers cemented between 2 slides of protective glass. Additionally we offer polarizing film for larger sizes or customized shapes and flexible solutions. Polarizing films consists of long chain polymers, which are aligned by a stretching process to produce the polarization effect. The polarizing film is covered on both sides with cellulose triacetate (TAC) for protection and is therefore mechanically stable.



Key features

- Reduce reflections, increase contrast
- High extinction ratio
- Pre-cut custom shapes for polarizing films on request

Applications

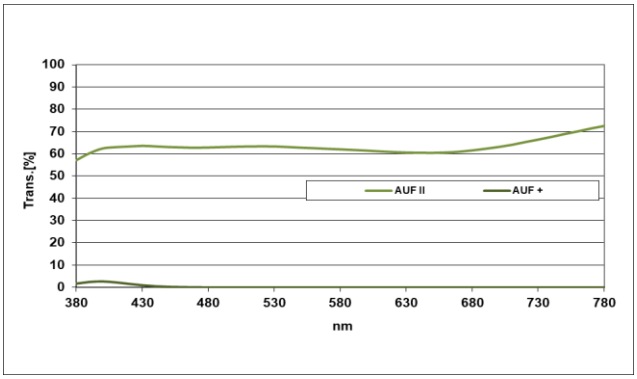
- 3D Applications
- Traffic surveillance/ITS
- Food & Beaverage Inspection
- Mechanical Stress Test
- LCD Technology

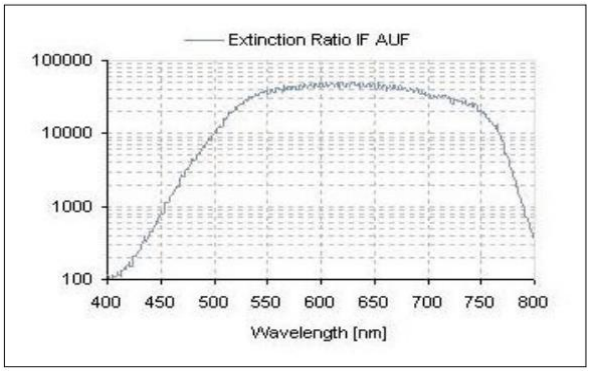
Standard Products

Name	Description
AUF	linear polarizer glass
AUF MRC	linear polarizer glass with AR coating
IFK P-W 76	linear polarizer foil, contrast 10,000:1
IFK P-W 64	linear polarizer foil, contrast 40,000:1

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Linear Glass Polarizer AUF





Technical specifications	according to ISO 10110
Wavelength range	420 nm - 750 nm
Transmittance	(Tp + Ts)/2>=34%
Surface	19-30 mm: 5/2x0,10 C2x0,10 L3x0,008 31-50 mm: 5/3x0,16 C3x0,16 L3x0,008 51-64 mm: 5/3x0,16 C3x0,16 L3x0,008
Wavefront distortion	19-30 mm: 13/1 (0.40) 31-50 mm: 13/1 (0.50) 50-64 mm: 13/1 (0.60)
Coating	uncoated
Temperature Range	-20°C - +50°C
Glass Thickness	2.7 +/- 0.25mm

Mounted Filter rotatable and fixable

IF AUF *Mount Thickness*

Mount	Thickness	ID
SN2 25.5	2,7 mm	1010313
SN2 27.0	2,7 mm	1010314
SN2 30.5	2,7 mm	1011655
SN2 34.0	2,7 mm	1085592
SN2 35.5	2,7 mm	1054941
SN2 37.0	2,7 mm	1054942
SN2 40.5	2,7 mm	1019304
SN2 43.0	2,7 mm	1054943
SN2 46.0	2,7 mm	1054944
SN2 49.0	2,7 mm	1054945

Mounted Filter rotatable

IF AUF *Mount Thickness*

Diameter	Thickness	ID
DH 25.5	2,7 mm	1006543
DH 27.0	2,7 mm	1003225
DH 30.5	2,7 mm	1006544
DH 35.5	2,7 mm	1006980
DH 37.0	2,7 mm	1006545
DH 40.5	2,7 mm	1003336
DH 43.0	2,7 mm	1008985
DH 46.0	2,7 mm	1007691
DH 49.0	2,7 mm	1003337
DH 52.0	2,7 mm	1007671
DH 55.0	2,7 mm	1080151
DH 58.0	2,7 mm	1009114
DH 62.0	2,7 mm	1078763
DH 67.0	2,7 mm	1003338

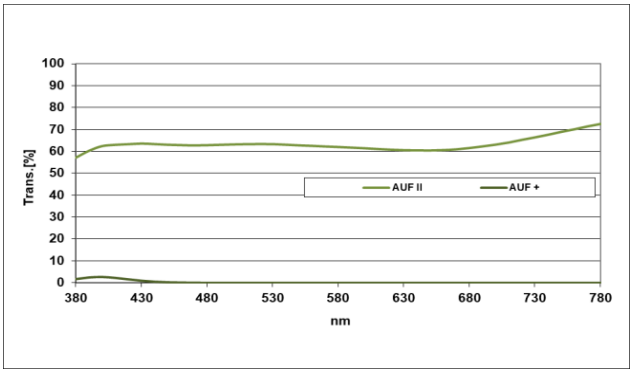
Unmounted Filterglass

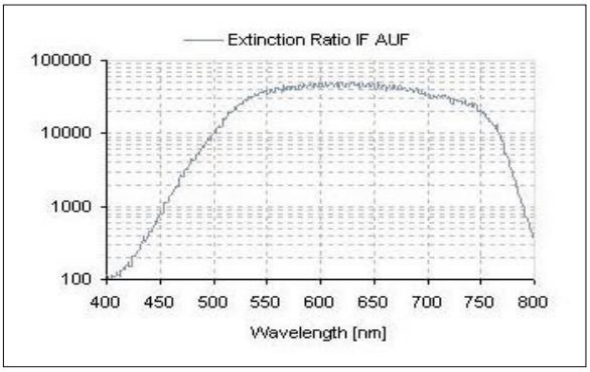
IF AUF Diameter Thickness

Mount	Thickness	ID	Mount	Thickness	ID
23.0 mm	2,7 mm	ID to be defined	33.0 mm	2,7 mm	1089781
24.0 mm	2,7 mm	ID to be defined	34.0 mm	2,7 mm	1086470
29.0 mm	2,7 mm	1089780			

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Linear Glass Polarizer AUF MRC





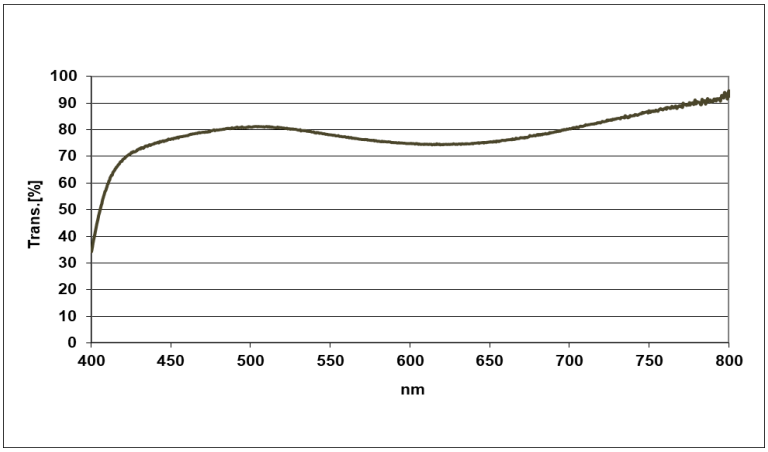
Technical specifications	according to ISO 10110
Wavelength range	420 nm - 750 nm
Transmittance	(Tp + Ts)/2>=34%
Surface	19-30 mm: 5/2x0,10 C2x0,10 L3x0,008 31-50 mm: 5/3x0,16 C3x0,16 L3x0,008 51-64 mm: 5/3x0,16 C3x0,16 L3x0,008
Wavefront distortion	19-30 mm: 13/1 (0.40) 31-50 mm: 13/1 (0.50) 50-64 mm: 13/1 (0.60)
Coating	MRC
Temperature Range	-20°C - +50°C
Glass Thickness	2.7 +/- 0.25mm

Mounted Filter rotatable and fixable			Mounted Filter rotatable		
IF AUF MRC *Mount Thickness*			IF AUF MRC *Mount Thickness*		
Mount	Thickness	ID	Diameter	Thickness	ID
SN2 25.5	2,7 mm	1053421	DH 25.5	2,7 mm	1019305
SN2 27.0	2,7 mm	1054935	DH 27.0	2,7 mm	1008192
SN2 30.5	2,7 mm	1010194	DH 30.5	2,7 mm	1076993
SN2 34.0	2,7 mm	1075140	DH 35.5	2,7 mm	1061081
SN2 35.5	2,7 mm	1059333	DH 37.0	2,7 mm	1017231
SN2 37.0	2,7 mm	1010311	DH 40.5	2,7 mm	1090589
SN2 40.5	2,7 mm	1063384	DH 43.0	2,7 mm	1075424
SN2 43.0	2,7 mm	1075281	DH 46.0	2,7 mm	1008191
SN2 46.0	2,7 mm	1054936	DH 49.0	2,7 mm	1007672
SN2 49.0	2,7 mm	1068232	DH 52.0	2,7 mm	1005685
			DH 55.0	2,7 mm	1013281
			DH 58.0	2,7 mm	1009449
			DH 62.0	2,7 mm	1009102
			DH 67.0	2,7 mm	1078764

Unmounted Filterglass					
IF AUF MRC Diameter Thickness					
Mount	Thickness	ID	Mount	Thickness	ID
23.0 mm	2,7 mm	ID to be defined	33.0 mm	2,7 mm	1090603
24.0 mm	2,7 mm	ID to be defined	34.0 mm	2,7 mm	ID to be defined
29.0 mm	2,7 mm	1090602			

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P-W 76 0.3

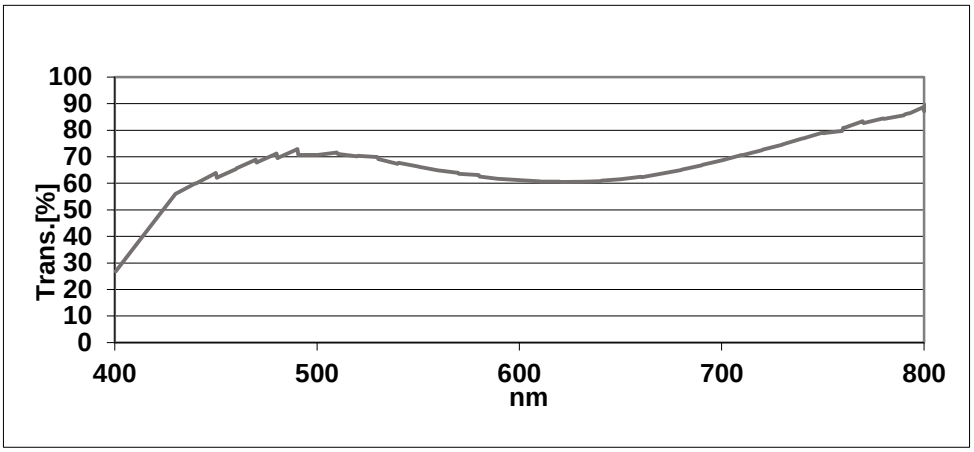


Technical specifications	according to ISO 10110
Wavelength	430 - 780 nm
Transmittance	> 30%
Extinction Ratio	> 10,000:1
Max. Size	431 x 1270 mm
Temperature Range	-50°C - +70°C
Substrate	Cellulose Triacetat (TAC
Thickness	0.3 mm +/- 0.008 mm

IFK P-W 76 0.3		
Size [mm]	Thickness	ID
425 x 1270	0.3 mm	1066587
425 x 635	0.3 mm	1056148
400 x 400	0.3 mm	1056149
200 x 200	0.3 mm	1056150
100 x 100	0.3 mm	1056151
50 x 50	0.3 mm	1056152

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P-W 64 0.4



Technical specifications	according to ISO 10110
Wavelength	430 - 780 nm
Transmittance	> 30%
Extinction Ratio	> 40,000:1
Max. Size	559 x 914 mm
Temperature Range	-50°C - +70°C
Substrate	Cellulose Triacetat (TAC
Thickness	0.4 mm +/- 0.008 mm

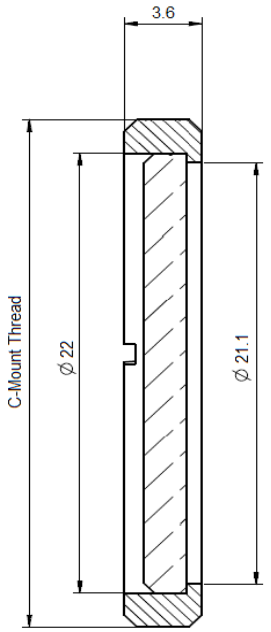
IFK P-W 76 0.3		
Size [mm]	Thickness	ID
559 x 914	0.4 mm	1006878
400 x 400	0.4 mm	1072586
200 x 200	0.4 mm	1072585
100 x 100	0.4 mm	1072581
50 x 50	0.4 mm	1005887

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Mounts

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 easyly 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.

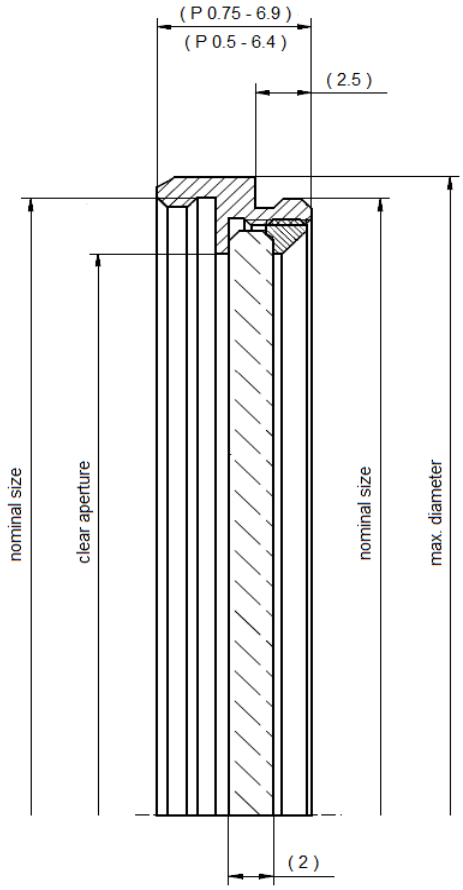


Key features	Applications
• Fits in C-Mount cameras • Black Anodized Brass	• To be mounted in C-Mount cameras • Vision Systems based on C-Mount mechanics

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 and male M-thread, and can be stacked if several filters must be combined.



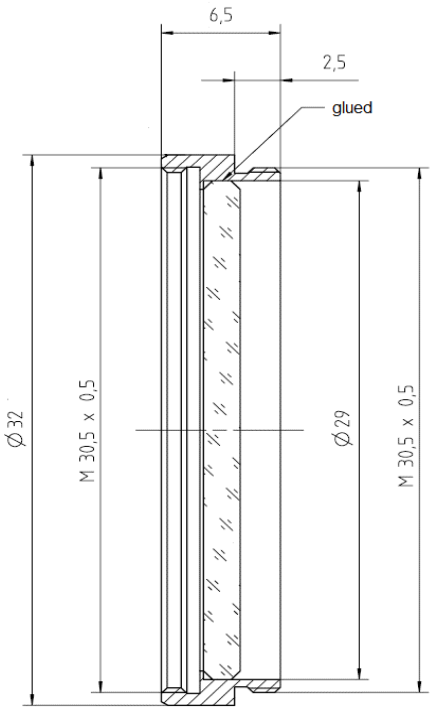
Key features	Applications
• Stackable • Robust • Black Anodized Brass	• Mounted on lenses in imaging applications • Mounted on measurement instruments

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

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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.

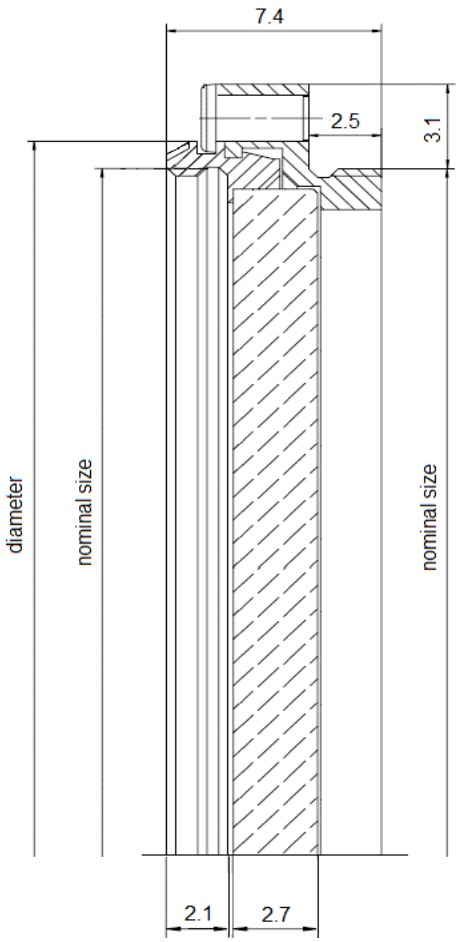


Key features	Applications
• Maximum Clear Aperture • No vignetting • Stackable • Robust • Black Anodized Brass	• Mounted on lenses in imaging applications • Mounted on measurement instruments

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.



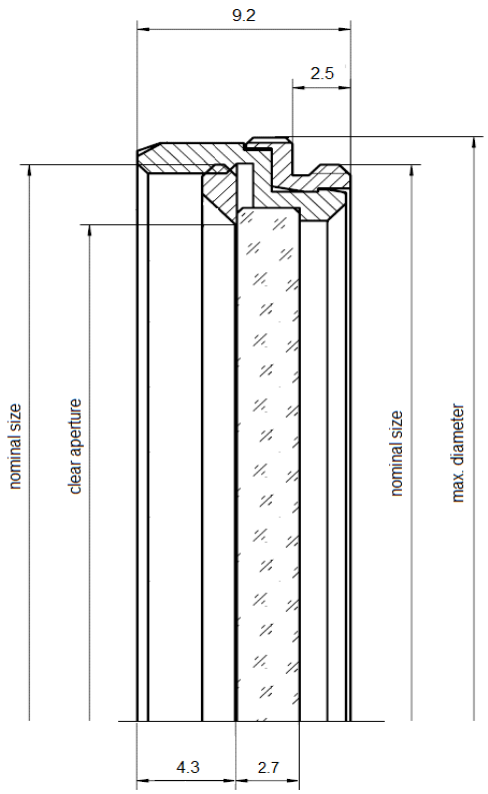
Key features	Applications
• Rotatable • High clear Aperture • No vignetting • Stackable • Robust • Black Anodized Brass	• Mounted on lenses in imaging applications • Mounted on measurement instruments

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

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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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