

Protective Filter

Protective Filters are used to protect a sensor, a lens or a complete measurement system. Sometimes they are mounted as gauge glass. Often it's just a window, a glass that passes VIS suited with a standard AR coating, as Schneider Kreuznach IFW 007 E series. It's also common to cut off either UV or IR as the IF 010 or IF 489 types. Protective Filter used in Day- and Night systems the VIS-85 is popular.



The filters are RoHS conforming.
Call us to discuss your OEM and custom requirements.

Key Features

- High transmission
- high reproducibility
- cost effective protection of sensible units
- added filter function

Applications

- IR cut sensor cover glass
- UV cut Lens protection
- Windows for gauges
- Day- and night security cameras
- Heat protection

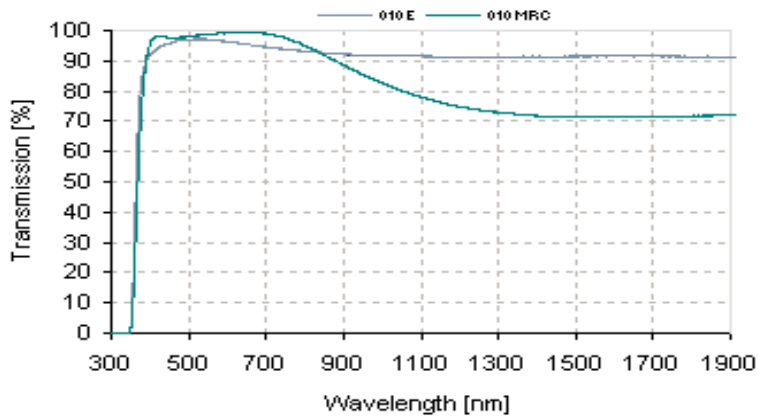
General technical specifications

according to ISO 10110

Parallelism	1 arc min'
Surface	19-30mm: 5/2x0,10 C2 x 0,10 L3x0,008
	31-50mm: 5/2x0,16 C1 x 0,16 L3x0,008
	51-64mm: 5/3x0,16 C3 x 0,16 L3x0,008
Wavefront distortion	19 – 30 mm:13/1 (0.2)
	31 – 50 mm:13/1 (0.25)
	51 – 64 mm:13/1 (0.35)
Climate Testing	
Slow temperature cycling	DIN ISO 9022-2-14-03 -1
Damp heat, cyclic	DIN ISO 9022-2-16-01-1
Chemical resistant	DIN ISO 9011-4-04-05
Adhesive strength	DIN ISO 9211-4-02-03

UV Cut Filter (IF 010)

UV Cut Filter 010



Technical Specifications

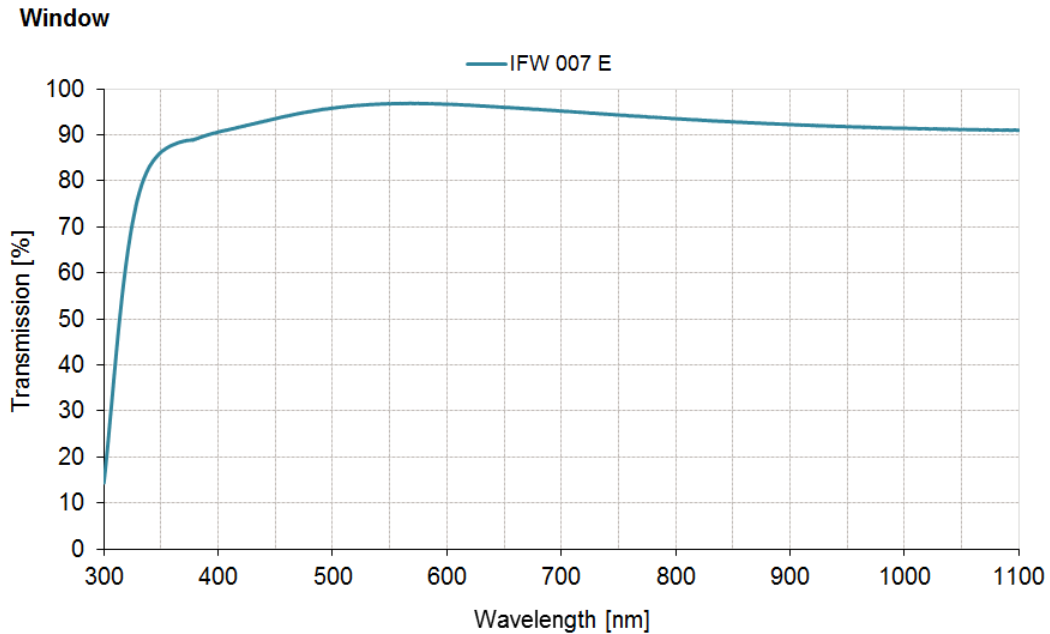
according to ISO 10110

Cut-on wavelength	> 365 nm +/- 10nm
Peak transmittance	> 90 %
Thickness	2.0 +/- 2.0 mm
AR coating	E or MRC

unmounted	filter glass	ID	mounted	filter	ID
27 mm	IFG 010 E 27,0	1075928	CMT	IF 010 E CMT	1076068
34 mm	IFG 010 E 34,0	1077197	SH 25.5	IF 010 E SH 25.5	1001900
40 mm	IFG 010 E 40,0	1077198	SH 27.0	IF 010 E SH 27.0	1001899
43 mm	IFG 010 E 43,0	1077199	SN1 30.5	IF 010 E SN1 30.5	1007002
46 mm	IFG 010 E 46,0	1053798	SH 35.5	IF 010 E SH 35.5	1005746
49 mm	IFG 010 E 49,0	1077201	SH 37.0	IF 010 E SH 37.0	1005747
52 mm	IFG 010 E 52,0	1077251	SH 40.5	IF 010 E SH 40.5	1001898
55 mm	IFG 010 E 55,0	1080527	SH 43.0	IF 010 E SH 43.0	1001897
64 mm	IFG 010 E 64,0	1080529	SH 46.0	IF 010 E SH 46.0	1008984
74 mm	IFG 010 E 74,0	1077203	SH 49.0	IF 010 E SH 49.0	1001896
			SH 52.0	IF 010 E SH 52.0	1001894
			SH 55.0	IF 010 E SH 55.0	1006986
			SH 62.0	IF 010 E SH 62.0	1008931
			SH 67.0	IF 010 E SH 67.0	1001842

unmounted	filter glass	ID	mounted	filter	ID
27 mm	IFG 010 MRC 27,0	1039747	CMT	IF 010 MRC CMT	
34 mm	IFG 010 MRC 34,0	1077149	SH 25.5	IF 010 MRC SH 25.5	1079179
40 mm	IFG 010 MRC 40,0	1080533	SH 27.0	IF 010 MRC SH 27.0	1079180
43 mm	IFG 010 MRC 43,0	1080534	SN1 30.5	IF 010 MRC SN1 30.5	1076887
46 mm	IFG 010 MRC 46,0	1080535	SH 35.5	IF 010 MRC SH 35.5	1078716
49 mm	IFG 010 MRC 49,0	1080536	SH 37.0	IF 010 MRC SH 37.0	
52 mm	IFG 010 MRC 52,0	1080537	SH 40.5	IF 010 MRC SH 40.5	
55 mm	IFG 010 MRC 55,0	1080538	SH 43.0	IF 010 MRC SH 43.0	
64 mm	IFG 010 MRC 64,0	1080541	SH 46.0	IF 010 MRC SH 46.0	
74 mm	IFG 010 MRC 74,0	1077203	SH 49.0	IF 010 MRC SH 49.0	
			SH 52.0	IF 010 MRC SH 52.0	
			SH 55.0	IF 010 MRC SH 55.0	1078717
			SH 62.0	IF 010 MRC SH 62.0	
			SH 67.0	IF 010 MRC SH 67.0	

Window IFW 007 E



Technical Specifications

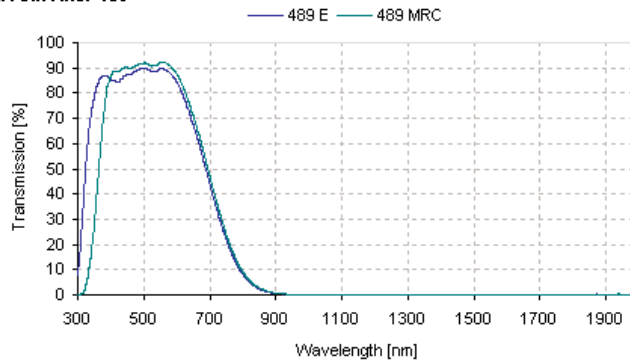
Specification according to ISO 10110

Transmittance band	380 nm – 1100 nm
Peak transmittance	> 90 %
Thickness	1.3 mm or 2mm +/- 2.0 mm
AR coating	E

unmounted	filter glass	ID	unmounted	filter	ID
12,5 mm	IFW 007 E 2 12,5	1077483	12,5 mm	IFW 007 E 1,3 12,5	10774890
25 mm	IFW 007 E 2 25,0	1077484	25 mm	IFW 007 E 1,3 25,0	10774891
50 mm	IFW 007 E 2 50,0	1077485	50 mm	IFW 007 E 1,3 50,0	10774892
74 mm	IFW 007 E 2 74,0	1077486	74 mm	IFW 007 E 1,3 74,0	10774893
25 x 25 mm	IFW 007 E 2 25,0 25,0	1007487	25 x 25 mm	IFW 007 E 1,3 2 25,0 25,0	10774894
25 x 50 mm	IFW 007 E 2 25,0 50,0	1077488	25 x 50 mm	IFW 007 E 1,3 25,0 50,0	10774895
50 x 50 mm	IFW 007 E 2 50,0 50,0	1077489	50 x 50 mm	IFW 007 E 1,3 50,0 50,0	10774896

IR Cut Filter (IF 489)

IR Cut Filter 489



Technical Specifications

Specification according to ISO 10110

Cut-off wavelength	< 750 nm +/- 10 nm
Peak transmittance	> 90 %
Thickness	2 mm +/- 0,2mm
AR coating	E or MRC

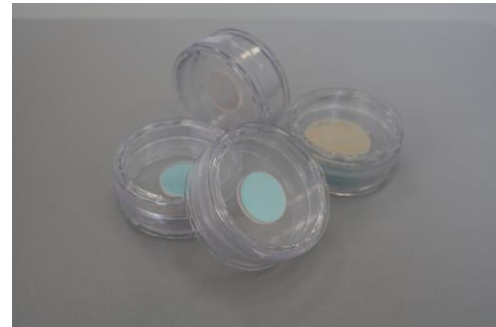
unmounted	filter glass	ID	mounted	filter	ID
27 mm	IFG 489 E 27,0	1071791	CMT	IF 489 E CMT	1071395
34 mm	IFG 489 E 34,0	1071870	SH 25.5	IF 489 E SH 25.5	1006975
36 mm	IFG 489 E 36,0	1086193	SH 27.0	IF 489 E SH 27.0	1006976
40 mm	IFG 489 E 40,0	1085718	SN1 30.5	IF 489 E SN1 30.5	1009034
49 mm	IFG 489 E 49,0	1071793	SH 35.5	IF 489 E SH 35.5	1056342
74 mm	IFG 489 E 74,0	1071792	SH 37.0	IF 489 E SH 37.0	1006978
			SH 40.5	IF 489 E SH 40.5	1001903
			SH 43.0	IF 489 E SH 43.0	1011903
			SH 46.0	IF 489 E SH 46.0	1011904
			SH 49.0	IF 489 E SH 49.0	1007828
			SH 52.0	IF 489 E SH 52.0	1001904
			SH 55.0	IF 489 E SH 55.0	1006979
			SH 62.0	IF 489 E SH 62.0	1019706
			SH 67.0	IF 489 E SH 67.0	1053787

unmounted	filter glass	ID	mounted	filter	ID
27 mm	IFG 489 MRC 27,0	1071795	CMT	IF 489 MRC CMT	
34 mm	IFG 489 MRC 34,0		SH 25.5	IF 489 MRC SH 25.5	1077652
36 mm	IFG 489 MRC 36,0		SH 27.0	IF 489 MRC SH 27.0	1084149
40 mm	IFG 489 MRC 40,0		SN1 30.5	IF 489 MRC SN1 30.5	
49 mm	IFG 489 MRC 49,0	1071796	SH 35.5	IF 489 MRC SH 35.5	1090972
74 mm	IFG 489 MRC 74,0	1017798	SH 37.0	IF 489 MRC SH 37.0	1072558
			SH 40.5	IF 48 MRC SH 40.5	1078721
			SH 43.0	IF 489 MRC SH 43.0	
			SH 46.0	IF 489 MRC SH 46.0	1086636
			SH 49.0	IF 489 MRC SH 49.0	1077653
			SH 52.0	IF 489 MRC SH 52.0	1084476
			SH 55.0	IF 489 MRC SH 55.0	
			SH 62.0	IF 489 MRC SH 62.0	1008406
			SH 67.0	IF 489 MRC SH 67.0	1084158

UV IR Cut Filter

Schneider-Kreuznach UV IR Cut filter transmit VIS light and block troublesome UV and IR light. Those popular filters are ideal as sensor cover glasses. The choice of wavelength ranges optimized for the different sensor characteristics ensures the best fitting filter for each application. The UV IR cut filters come with our ultra-low reflection coating.

Schneider -Kreuznach bandpass filters are RoHS conform. Custom sizes are available on request.



Key Features

- Ave. Transmittance 95 %
- Steep Slopes
- Wavelength Tolerance +/- 1 %
- Ultra Low Reflection
- Deep Blocking / High OD

Applications

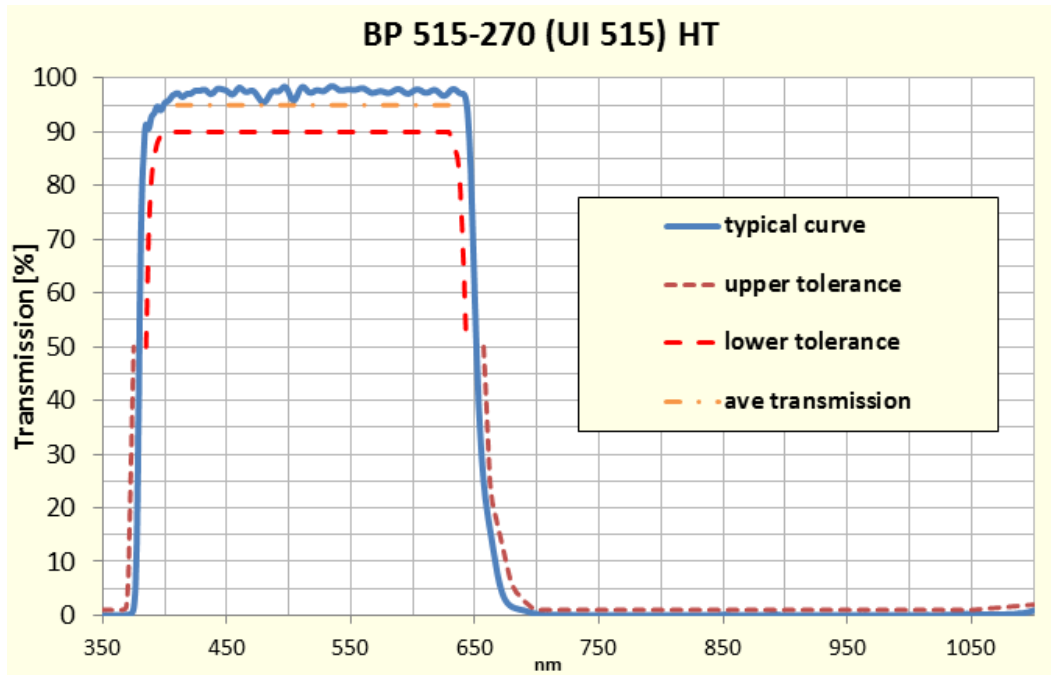
- Machine Vision System
- Inspection systems
- Surveillance cameras
- Viewer

General technical specifications

according to ISO 10110

Parallelism	1'
Surface	19-30mm: 5/2x0,10 C2 x 0,10 L3x0,008 31-50mm: 5/2x0,16 C1 x 0,16 L3x0,008 51-64mm: 5/3x0,16 C3 x 0,16 L3x0,008
Wavefront distortion	19 – 30 mm:13/1 (0.2) 31 – 50 mm:13/1 (0.25) 51 – 64 mm:13/1 (0.35)
Thickness	2.0 +/- 0.08 mm
Climate Testing	
Slow temperature cycling	DIN ISO 9022-2-14-03 -1
Damp heat, cyclic	DIN ISO 9022-2-16-01-1
Chemical resistant	DIN ISO 9011-4-04-05
Adhesive strength	DIN ISO 9211-4-02-03

UV IR Cut Filter BP 515-270 (UI 515) HT



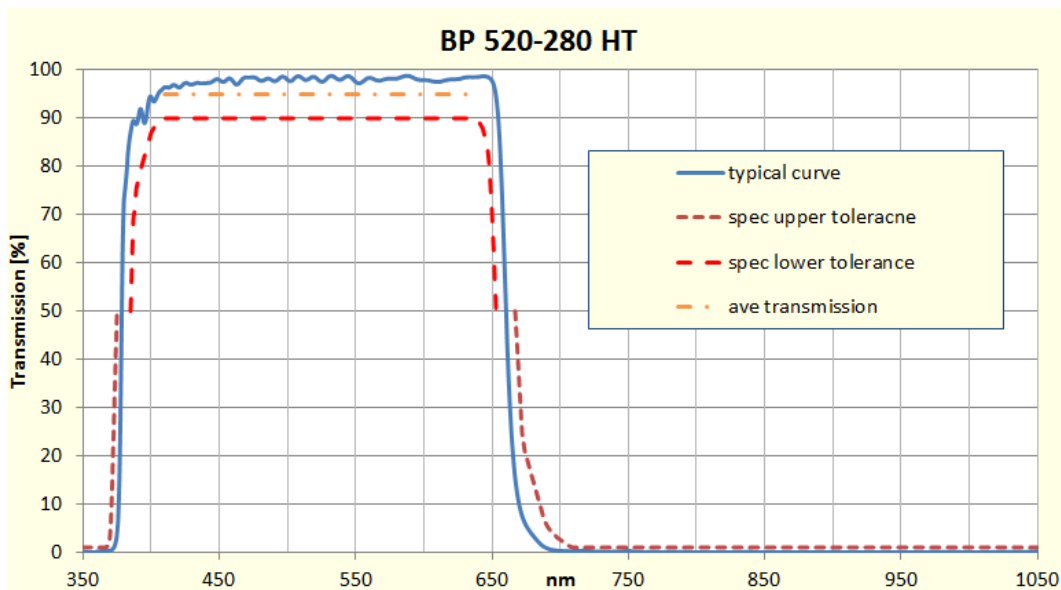
according to ISO 10110

Technical specifications

Angle of incident	0° +/- 8°
Wavelength range	380 +/- 5 nm to 650 +/- 7nm
Transmittance	410 - 630 nm: T _{ave} > 95% 400 – 630 nm: T _{min} > 90%
Blocking	UV - 365 nm: T _{abs} < 1.0% 700 - 1050 nm: T _{abs} < 0.5%
AR Coating	ULR

unmounted	filter glass	ID	mounted	filter	ID
19 mm	IFG BP 515-270 HT 19,0 2-0001	1082556	CMT	IF BP 515-270 HT CMT	1085675
27 mm	IFG BP 515-270 HT 27,0 2-0001	1082557	SH 25.5	IF BP 515-270 HT SH 25.5	1085984
34 mm	IFG BP 515-270 HT 34,0 2-0001	1082559	SH 27.0	IF BP 515-270 HT SH 27.0	
40 mm	IFG BP 515-270 HT 40,0 2-0001		SN1 30.5	IF BP 515-270 HT SN1 30.5	1085643
43 mm	IFG BP 515-270 HT 43,0 2-0001	1082560	SH 35.5	IF BP 515-270 HT SH 35.5	1088597
55 mm	IFG BP 515-270 HT 55,0 2-0001	1082561	SH 37.0	IF BP 515-270 HT SH 37.0	
64 mm	IFG BP 515-270 HT 64,0 2-0001	1082562	SH 39.0	IF BP 515-270 HT SH 39.0	1085512
			SH 40.5	IF BP 515-270 HT SH 40.5	1086294
			SH 43.0	IF BP 515-270 HT SH 43.0	1086235
			SH 46.0	IF BP 515-270 HT SH 46.0	1085029
			SH 49.0	IF BP 515-270 HT SH 49.0	
			SH 52.0	IF BP 515-270 HT SH 52.0	
			SH 55.0	IF BP 515-270 HT SH 55.0	1086895
			SH 58.0	IF BP 515-270 HT SH 58.0	
			SH 62.0	IF BP 515-270 HT SH 62.0	1084808
			SH 67.0	IF BP 515-270 HT SH 67.0	

UV IR Cut Filter BP 520-280 HT



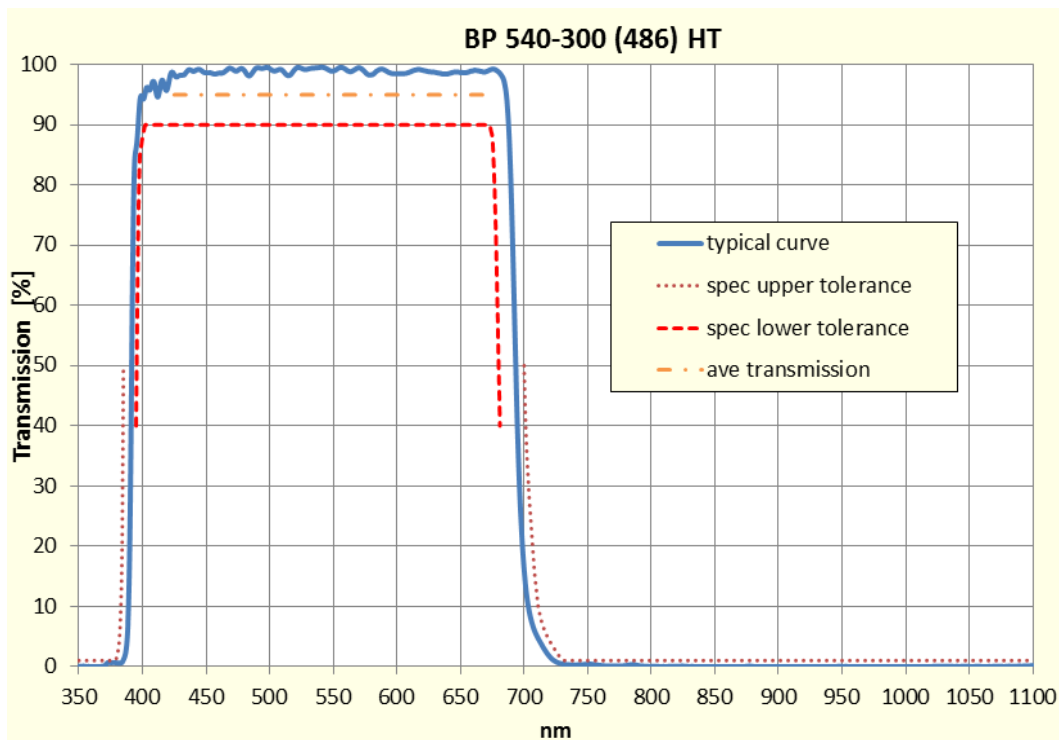
Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Wavelength range	380 +/- 5 nm to 660 +/- 7nm
Transmittance	410 - 640 nm: T _{ave} > 95% 410 - 640 nm: T _{min} > 90%
Blocking	UV - 365 nm: T _{abs} < 1.0% 710 - 1050 nm: T _{abs} < 1.5%
AR coating	ULR

unmounted	filter glass	ID	mounted	filter	ID
19 mm	IFG BP 520-280 HT 19,0 2-0001	1082564	CMT	IF BP 520-280 HT CMT	1085676
27 mm	IFG BP 520-280 HT 27,0 2-0001	1082565	SH 25.5	IF BP 520-280 HT SH 25.5	1089353
34 mm	IFG BP 520-280 HT 34,0 2-0001	1082566	SH 27.0	IF BP 520-280 HT SH 27.0	
40 mm	IFG BP 520-280 HT 40,0 2-0001	1085971	SN1 30.5	IF BP 520-280 HT SN1 30.5	1085644
43 mm	IFG BP 520-280 HT 43,0 2-0001	1082567	SH 35.5	IF BP 520-280 HT SH 35.5	
55 mm	IFG BP 520-280 HT 55,0 2-0001	1082568	SH 37.0	IF BP 520-280 HT SH 37.0	
64 mm	IFG BP 520-280 HT 64,0 2-0001	1082569	SH 39.0	IF BP 520-280 HT SH 39.0	
			SH 40.5	IF BP 520-280 HT SH 40.5	
			SH 43.0	IF BP 520-280 HT SH 43.0	
			SH 46.0	IF BP 520-280 HT SH 46.0	
			SH 49.0	IF BP 520-280 HT SH 49.0	
			SH 52.0	IF BP 520-280 HT SH 52.0	
			SH 55.0	IF BP 520-280 HT SH 55.0	
			SH 58.0	IF BP 520-280 HT SH 58.0	
			SH 62.0	IF BP 520-280 HT SH 62.0	
			SH 67.0	IF BP 520-280 HT SH 67.0	

UV IR Cut Filter BP 540-300 (486) HT



Technical specifications

according to ISO 10110

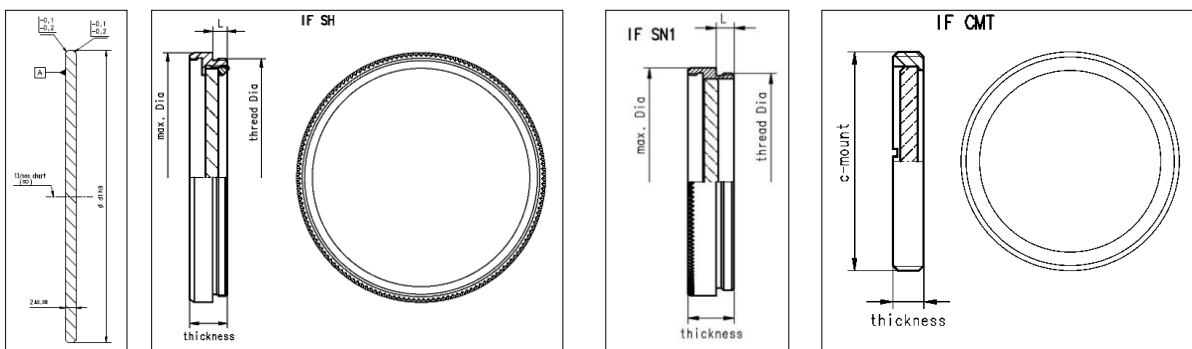
Angle of incident	0° +/- 8°
Wavelength range	390 +/- 5 nm to 690 +/- 7nm
Transmittance	425 - 670 nm: T _{ave} > 95% 405 - 670 nm: T _{min} > 90%
Blocking	UV - 350 nm: T < 0.5% 735 - 1100 nm: T _{ave} < 0.5% 735 - 1100 nm: T _{min} < 1.0%
AR coating	ULR

un-mounted	filter glass	ID	mounted	filter	ID
19 mm	IFG BP 540-300 (486) HT 19,0 2-0001	1082456	CMT	IF BP 540-300 (486) HT CMT	1085677
27 mm	IFG BP 540-300 (486) HT 27,0 2-0001	1082457	SH 25.5	IF BP 540-300 (486) HT SH 25.5	1085602
34 mm	IFG BP 540-300 (486) HT 34,0 2-0001	1082458	SH 27.0	IF BP 540-300 (486) HT SH 27.0	1085603
40 mm	IFG BP 540-300 (486) HT 40,0 2-0001		SN1 30.5	IF BP 540-300 (486) HT SN1 30.5	1085646
43 mm	IFG BP 540-300 (486) HT 43,0 2-0001	1082459	SH 35.5	IF BP 540-300 (486) HT SH 35.5	1085607
55 mm	IFG BP 540-300 (486) HT 55,0 2-0001	1082460	SH 37.0	IF BP 540-300 (486) HT SH 37.0	1087383
64 mm	IFG BP 540-300 (486) HT 64,0 2-0001	1082461	SH 39.0	IF BP 540-300 (486) HT SH 39.0	1085511
			SH 40.5	IF BP 540-300 (486) HT SH 40.5	1085604
			SH 43.0	IF BP 540-300 (486) HT SH 43.0	1085608
			SH 46.0	IF BP 540-300 (486) HT SH 46.0	1085030
			SH 49.0	IF BP 540-300 (486) HT SH 49.0	
			SH 52.0	IF BP 540-300 (486) HT SH 52.0	1056327
			SH 55.0	IF BP 540-300 (486) HT SH 55.0	1090973
			SH 58.0	IF BP 540-300 (486) HT SH 58.0	1085605
			SH 62.0	IF BP 540-300 (486) HT SH 62.0	1085606
			SH 67.0	IF BP 540-300 (486) HT SH 67.0	1085058

UV IR Cut Filter

Next to the standard sizes we offer more on request. Schneider-Kreuznach provides professional highly accurate μ water jet cutting capability. This technology allows cutting almost any needed shape. More mounted diameters are available for high volume on request.

See also Schneider-Kreuznach bandpass filters.



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