

# Narrow Bandpass Filter

Schneider-Kreuznach magnetron sputtered industrial narrow bandpass filters feature steep slopes for sophisticated applications that require a sharp transition between high transmission and deep blocking at stable cut-on and cut-off wavelengths.

The layers are applied by means of magnetron sputtering, a special coating process.

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



## Key Features

- Ave. Transmittance 90 %
- Steep Slopes
- Wavelength Tolerance +/- 3nm
- Deep Blocking / High OD

## Applications

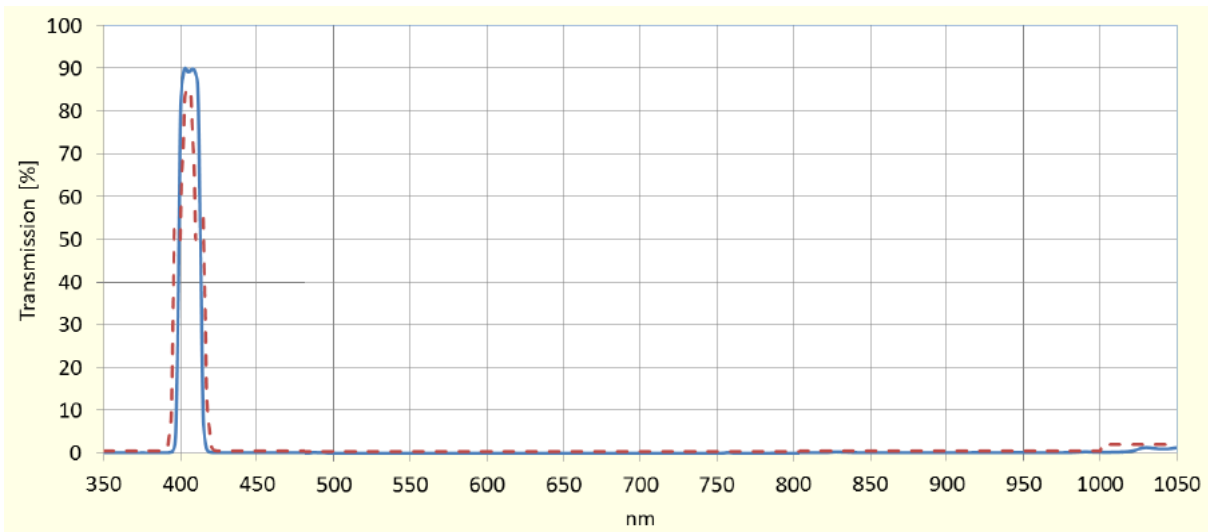
- Laser application
- 3D Measurement / Metrology
- Food & Beverage Inspection
- Ophthalmology
- Microscopy

## General technical specifications

according to ISO 10110

Parallelism	1'
Surface	10 – 18 mm: 5/1x0,10; C1x0,10; L3x0,008
	19 – 30 mm: 5/2x0,10; C2x0,10; L3x0,008
	31 – 50 mm: 5/2x0,16; C2x0,16; L3x0,008
	51 – 64 mm: 5/3x0,16; C3x0,16; L3x0,008
Wavefront distortion	10 – 30 mm:13/1 (0.25)
	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

# Narrow Bandpass Filter NBP 405-15 HT



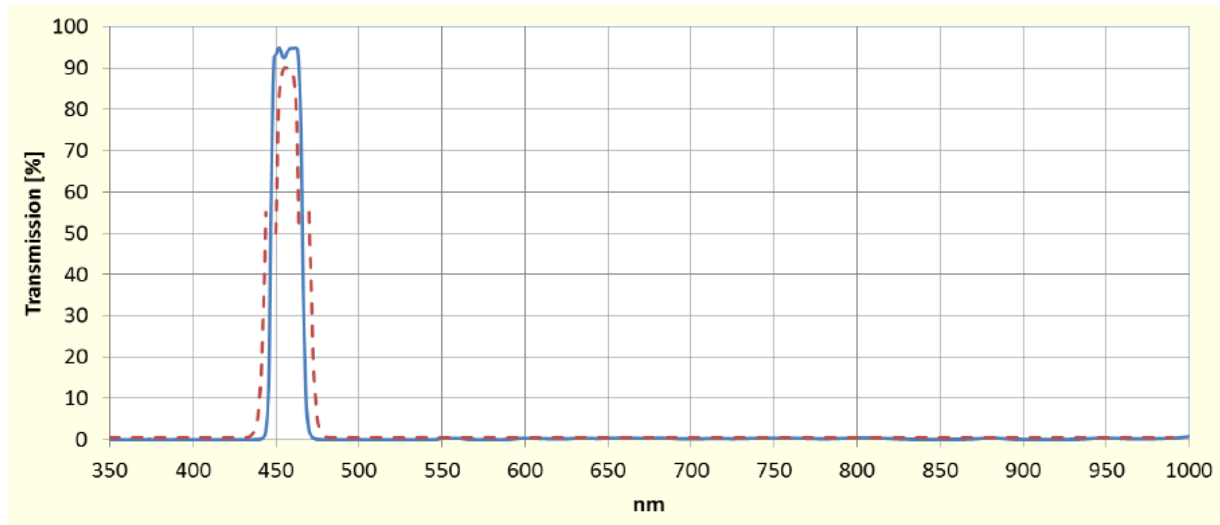
## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	405 nm +/- 3nm
Full Width at Half Maximum (FWHM)	14 nm +/- 1 nm
Transmittance	403 - 407nm: Tabs > 80%
Blocking	UV - 395 nm: Tabs < 0.5% 425 - 1000 nm: Tabs < 0.5%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 405-15 HT 10,0 2-0001	1085826	CMT	IF NBP 405-15 HT CMT	
19 mm	IFG NBP 405-15 HT 19,0 2-0001	1085827	SH 25.5	IF NBP 405-15 HT SH 25.5	
22 mm	IFG NBP 405-15 HT 22,0 2-0001	1085828	SH 27.0	IF NBP 405-15 HT SH 27.0	
24 mm	IFG NBP 405-15 HT 24,0 2-0001	1085829	SN1 30.5	IF NBP 405-15 HT SN1 30.5	
27 mm	IFG NBP 405-15 HT 27,0 2-0001	1085830	SH 35.5	IF NBP 405-15 HT SH 35.5	
29 mm	IFG NBP 405-15 HT 29,0 2-0001	1085831	SH 37.0	IF NBP 405-15 HT SH 37.0	
34 mm	IFG NBP 405-15 HT 34,0 2-0001	1085832	SH 40.5	IF NBP 405-15 HT SH 40.5	
46 mm	IFG NBP 405-15 HT 46,0 2-0001	1085833	SH 43.0	IF NBP 405-15 HT SH 43.0	
55 mm	IFG NBP 405-15 HT 55,0 2-0001	1085834	SH 52.0	IF NBP 405-15 HT SH 52.0	1085802

# Narrow Bandpass Filter NBP 457-20 HT



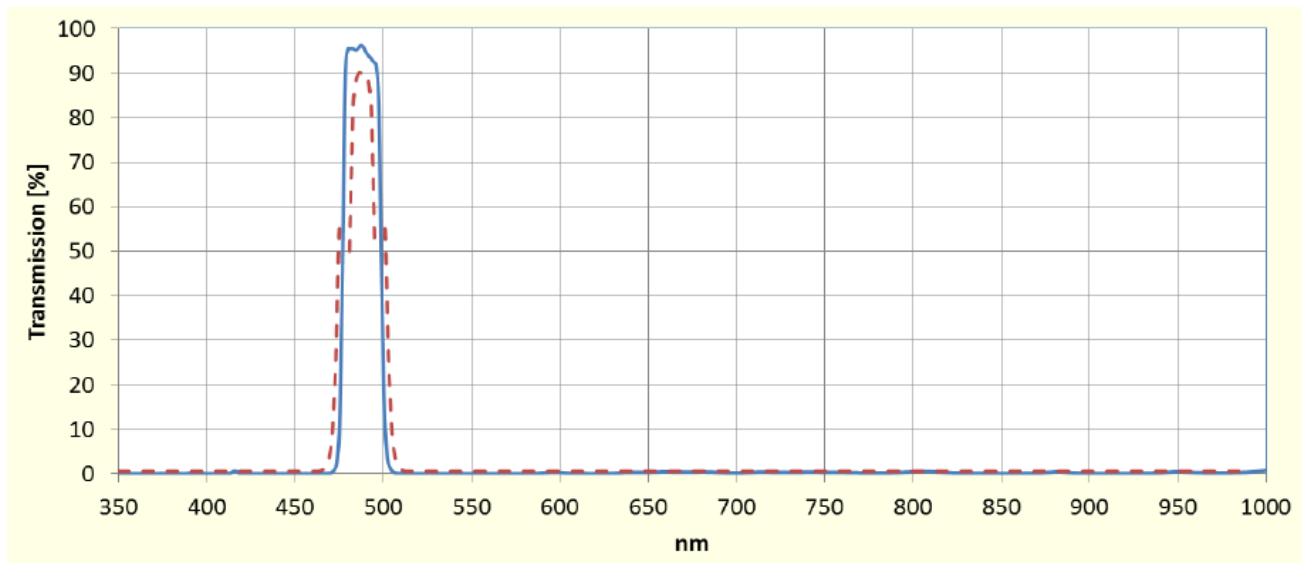
## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	457 nm +/- 3nm nm
Full Width at Half Maximum (FWHM)	19 nm +/- 1 nm
Transmittance	445 - 459 nm: Tabs > 90%
Blocking	UV - 430 nm: Tabs < 0.5% 485 - 990 nm: Tabs < 0.5%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 457-20 HT 10,0 2-0001	1085844	CMT	IF NBP 457-20 HT CMT	
19 mm	IFG NBP 457-20 HT 19,0 2-0001	1085845	SH 25.5	IF NBP 457-20 HT SH 25.5	
22 mm	IFG NBP 457-20 HT 22,0 2-0001	1085846	SH 27.0	IF NBP 457-20 HT SH 27.0	1086633
24 mm	IFG NBP 457-20 HT 24,0 2-0001	1085847	SN1 30.5	IF NBP 457-20 HT SN1 30.5	
27 mm	IFG NBP 457-20 HT 27,0 2-0001	1085848	SH 35.5	IF NBP 457-20 HT SH 35.5	
29 mm	IFG NBP 457-20 HT 29,0 2-0001	1085849	SH 37.0	IF NBP 457-20 HT SH 37.0	
34 mm	IFG NBP 457-20 HT 34,0 2-0001	1085850	SH 40.5	IF NBP 457-20 HT SH 40.5	
46 mm	IFG NBP 457-20 HT 46,0 2-0001	1085851	SH 43.0	IF NBP 457-20 HT SH 43.0	
55 mm	IFG NBP 457-20 HT 55,0 2-0001	1085852	SH 52.0	IF NBP 457-20 HT SH 52.0	

# Narrow Bandpass Filter NBP 488-20 HT



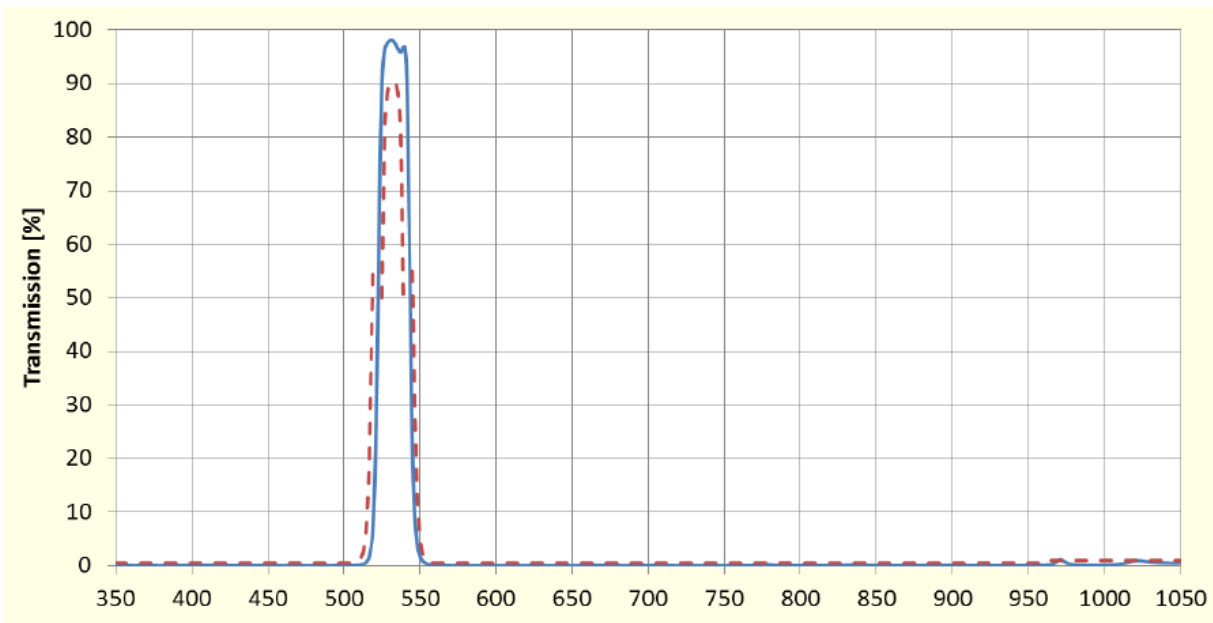
## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	488 nm +/- 3nm nm
Full Width at Half Maximum (FWHM)	22 nm +/- 1 nm
Transmittance	486 – 490 nm: Tabs > 90%
Blocking	UV - 460 nm: Tabs < 0.5% 515 - 990 nm: Tabs < 0.5%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 488-20 HT 10,0 2-0001	1085759	CMT	IF NBP 488-20 HT CMT	
19 mm	IFG NBP 488-20 HT 19,0 2-0001	1085760	SH 25.5	IF NBP 488-20 HT SH 25.5	
22 mm	IFG NBP 488-20 HT 22,0 2-0001	1085761	SH 27.0	IF NBP 488-20 HT SH 27.0	1086963
24 mm	IFG NBP 488-20 HT 24,0 2-0001	1085762	SN1 30.5	IF NBP 488-20 HT SN1 30.5	1085798
27 mm	IFG NBP 488-20 HT 27,0 2-0001	1085763	SH 35.5	IF NBP 488-20 HT SH 35.5	
29 mm	IFG NBP 488-20 HT 29,0 2-0001	1085764	SH 37.0	IF NBP 488-20 HT SH 37.0	
34 mm	IFG NBP 488-20 HT 34,0 2-0001	1085765	SH 40.5	IF NBP 488-20 HT SH 40.5	
46 mm	IFG NBP 488-20 HT 46,0 2-0001	1085766	SH 43.0	IF NBP 488-20 HT SH 43.0	
55 mm	IFG NBP 488-20 HT 55,0 2-0001	1085767	SH 52.0	IF NBP 488-20 HT SH 52.0	

# Narrow Bandpass Filter NBP 532-20 HT



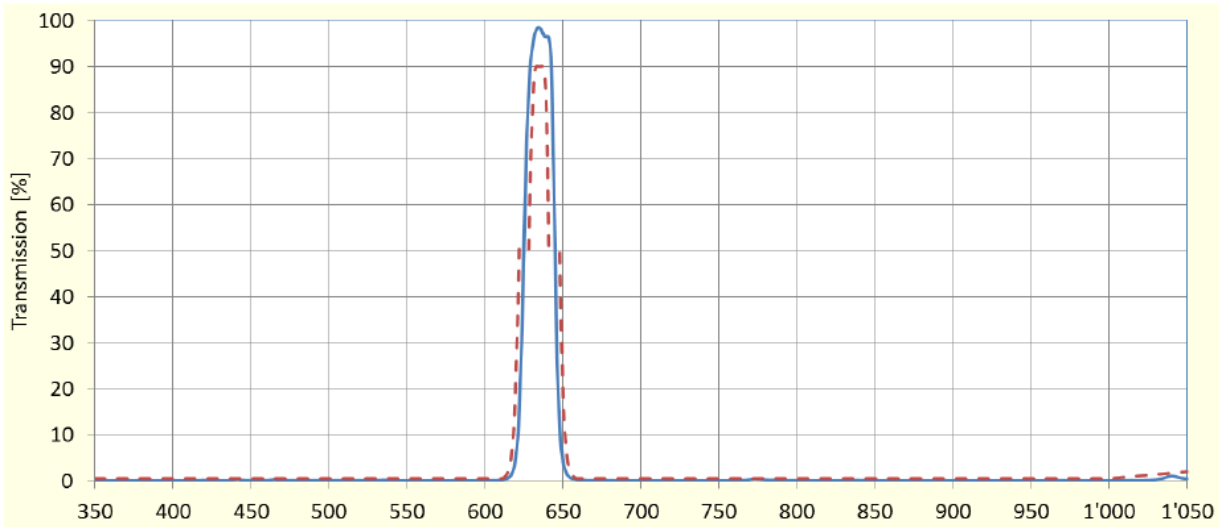
## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	532 nm +/- 3nm nm
Full Width at Half Maximum (FWHM)	21 nm +/- 1 nm
Transmittance	530 – 534 nm: Tabs > 90%
Blocking	UV - 505 nm: Tabs < 0.5%
	560 - 960 nm: Tabs < 0.5%
	960 - 1100 nm: Tabs < 1.0%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 532-20 HT 10,0 2-0001	1085934	CMT	IF NBP 532-20 HT CMT	
19 mm	IFG NBP 532-20 HT 19,0 2-0001	1085935	SH 25.5	IF NBP 532-20 HT SH 25.5	
22 mm	IFG NBP 532-20 HT 22,0 2-0001	1085936	SH 27.0	IF NBP 532-20 HT SH 27.0	1086964
24 mm	IFG NBP 532-20 HT 24,0 2-0001	1085937	SN1 30.5	IF NBP 532-20 HT SN1 30.5	1085803
27 mm	IFG NBP 532-20 HT 27,0 2-0001	1085938	SH 35.5	IF NBP 532-20 HT SH 35.5	
29 mm	IFG NBP 532-20 HT 29,0 2-0001	1085939	SH 37.0	IF NBP 532-20 HT SH 37.0	
34 mm	IFG NBP 532-20 HT 34,0 2-0001	1085940	SH 40.5	IF NBP 532-20 HT SH 40.5	
46 mm	IFG NBP 532-20 HT 46,0 2-0001	1085941	SH 43.0	IF NBP 532-20 HT SH 43.0	
55 mm	IFG NBP 532-20 HT 55,0 2-0001	1085942	SH 52.0	IF NBP 532-20 HT SH 52.0	

# Narrow Bandpass Filter NBP 635-20 HT



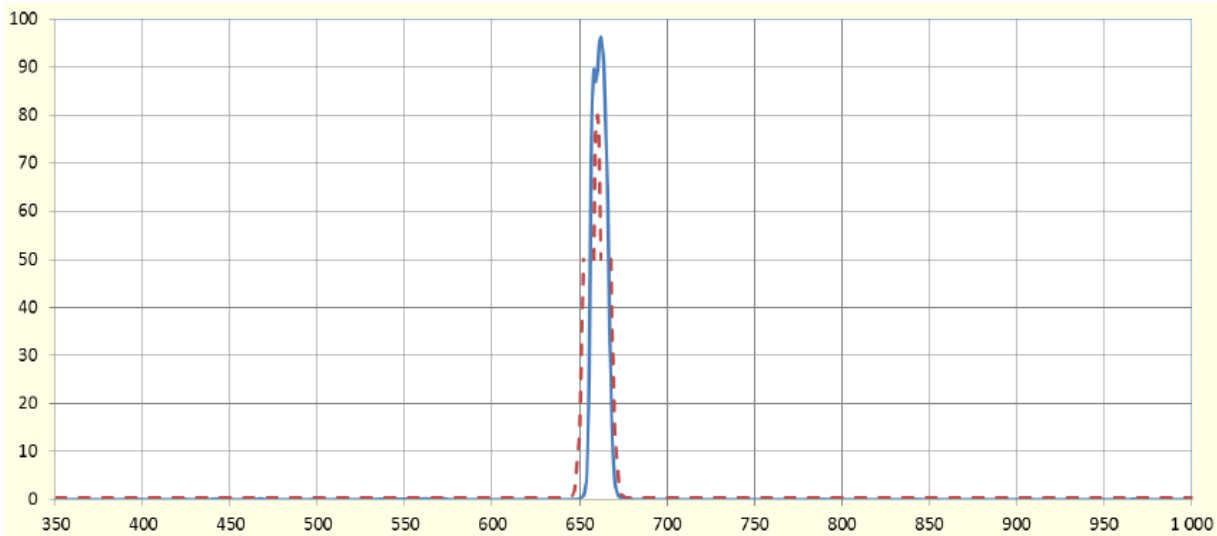
## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	635 nm +/- 3nm nm
Full Width at Half Maximum (FWHM)	20 nm +/- 1 nm
Transmittance	633 – 637 nm: Tabs > 90%
Blocking	UV - 610 nm: Tabs < 0.5%
	660 - 1000 nm: Tabs < 0.5%
	1000 - 1100 nm: Tabs < 2.0%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 635-20 HT 10,0 2-0001	1085476	CMT	IF NBP 635-20 HT CMT	
19 mm	IFG NBP 635-20 HT 19,0 2-0001	1085477	SH 25.5	IF NBP 635-20 HT SH 25.5	
22 mm	IFG NBP 635-20 HT 22,0 2-0001	1085478	SH 27.0	IF NBP 635-20 HT SH 27.0	
24 mm	IFG NBP 635-20 HT 24,0 2-0001	1085479	SN1 30.5	IF NBP 635-20 HT SN1 30.5	1085800
27 mm	IFG NBP 635-20 HT 27,0 2-0001	1085480	SH 35.5	IF NBP 635-20 HT SH 35.5	
29 mm	IFG NBP 635-20 HT 29,0 2-0001	1085481	SH 37.0	IF NBP 635-20 HT SH 37.0	
34 mm	IFG NBP 635-20 HT 34,0 2-0001	1085482	SH 40.5	IF NBP 635-20 HT SH 40.5	
46 mm	IFG NBP 635-20 HT 46,0 2-0001	1085483	SH 43.0	IF NBP 635-20 HT SH 43.0	
55 mm	IFG NBP 635-20 HT 55,0 2-0001	1085484	SH 52.0	IF NBP 635-20 HT SH 52.0	

# Narrow Bandpass Filter NBP 660-10 HT



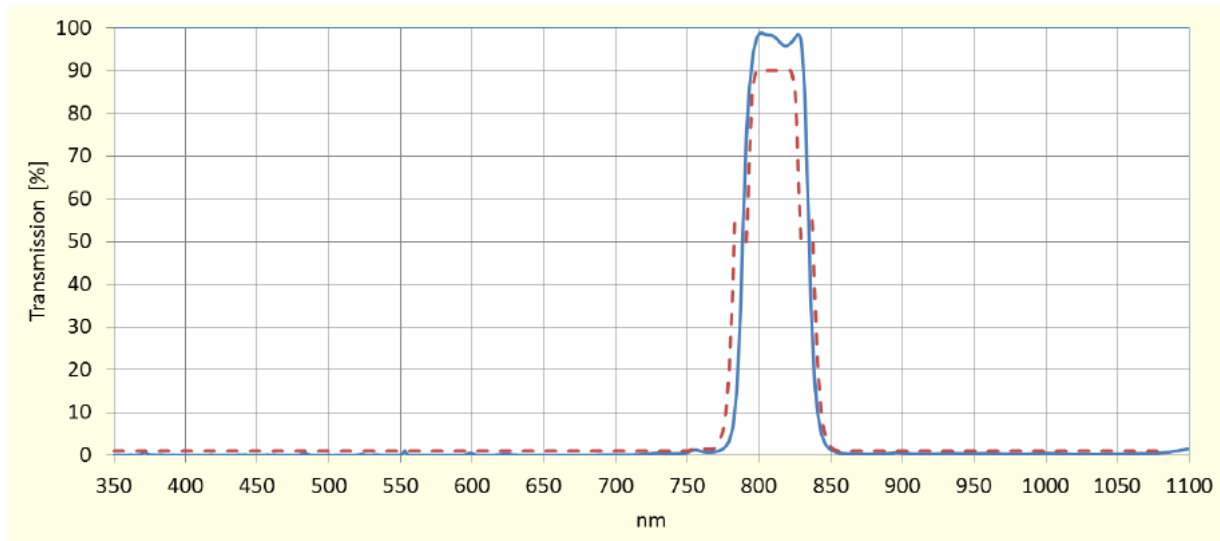
## Technical specifications

according to ISO 10110

Angle of incident	$0^\circ \pm 5^\circ$
Central Wavelength (CWL)	660 nm $\pm$ 3nm nm
Full Width at Half Maximum (FWHM)	10 nm $\pm$ 1 nm
Transmittance	658– 662 nm: Tabs > 80%
Blocking	UV - 610 nm: Tabs < 0.5% Tave < 0.1% 680 - 1000 nm: Tabs < 0.5% Tave < 0.1%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 660-10 HT 10,0 2-0001	1085854	CMT	IF NBP 660-10 HT CMT	1089657
19 mm	IFG NBP 660-10 HT 19,0 2-0001	1085855	SH 25.5	IF NBP 660-10 HT SH 25.5	
22 mm	IFG NBP 660-10 HT 22,0 2-0001	1085863	SH 27.0	IF NBP 660-10 HT SH 27.0	1090143
24 mm	IFG NBP 660-10 HT 24,0 2-0001	1085864	SN1 30.5	IF NBP 660-10 HT SN1 30.5	1085801
27 mm	IFG NBP 660-10 HT 27,0 2-0001	1085865	SH 35.5	IF NBP 660-10 HT SH 35.5	
29 mm	IFG NBP 660-10 HT 29,0 2-0001	1085866	SH 37.0	IF NBP 660-10 HT SH 37.0	
34 mm	IFG NBP 660-10 HT 34,0 2-0001	1085856	SH 39.0	IF NBP 660-10 HT SH 39.0	
46 mm	IFG NBP 660-10 HT 46,0 2-0001	1085867	SH 40.5	IF NBP 660-10 HT SH 40.5	
55 mm	IFG NBP 660-10 HT 55,0 2-0001	1085868	SH 43.0	IF NBP 660-10 HT SH 43.0	
			SH 52.0	IF NBP 660-10 HT SH 52.0	

# Narrow Bandpass Filter NBP 810-45 HT



## Technical specifications

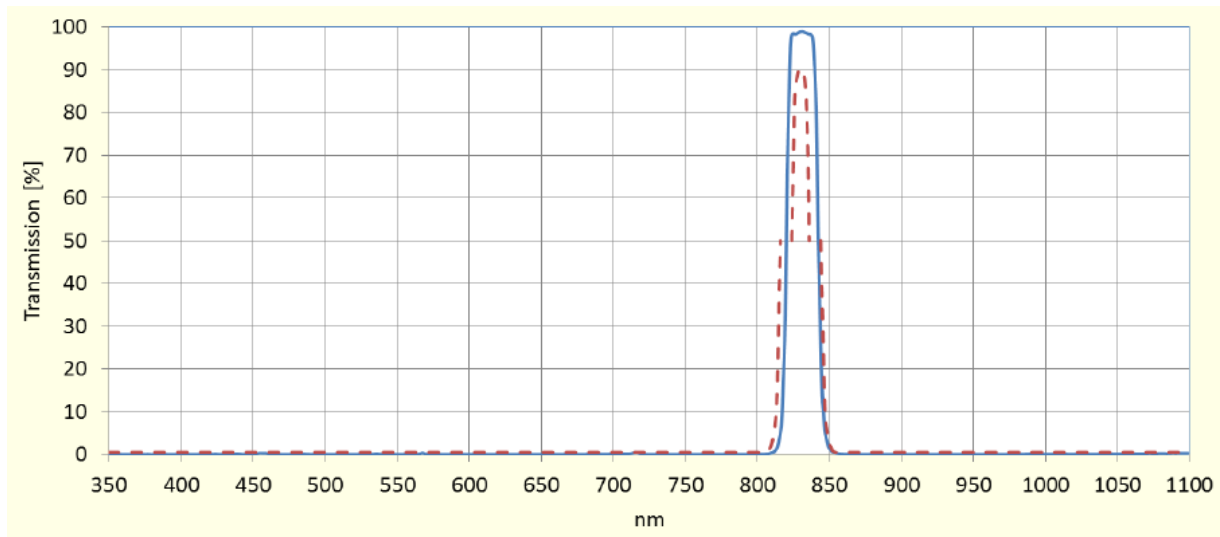
according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	810 nm +/- 4 nm
Full Width at Half Maximum (FWHM)	45 nm +/- 2 nm
Transmittance	800– 820 nm: Tabs > 90%
Blocking	UV - 750 nm: Tabs < 1.0% 855 - 1080 nm: Tabs < 1.0%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 810-45 HT 10,0 2-0001	1085476	CMT	IF NBP 810-45 HT CMT	
19 mm	IFG NBP 810-45 HT 19,0 2-0001	1085477	SH 25.5	IF NBP 810-45 HT SH 25.5	
22 mm	IFG NBP 810-45 HT 22,0 2-0001	1085478	SH 27.0	IF NBP 810-45 HT SH 27.0	
24 mm	IFG NBP 810-45 HT 24,0 2-0001	1085479	SN1 30.5	IF NBP 810-45 HT SN1 30.5	1085804
27 mm	IFG NBP 810-45 HT 27,0 2-0001	1085480	SH 35.5	IF NBP 810-45 HT SH 35.5	
29 mm	IFG NBP 810-45 HT 29,0 2-0001	1085481	SH 37.0	IF NBP 810-45 HT SH 37.0	
34 mm	IFG NBP 810-45 HT 34,0 2-0001	1085482	SH 39.0	IF NBP 810-45 HT SH 39.0	
46 mm	IFG NBP 810-45 HT 46,0 2-0001	1085483	SH 40.5	IF NBP 810-45 HT SH 40.5	
55 mm	IFG NBP 810-45 HT 55,0 2-0001	1085484	SH 43.0	IF NBP 810-45 HT SH 43.0	
			SH 52.0	IF NBP 810-45 HT SH 52.0	



# Narrow Bandpass Filter NBP 830-20 HT



## Technical specifications

according to ISO 10110

Angle of incident	0° +/- 8°
Central Wavelength (CWL)	830 nm +/- 4nm nm
Full Width at Half Maximum (FWHM)	22 nm +/- 1 nm
Transmittance	828– 832 nm: Tabs > 90%
Blocking	UV - 805 nm: Tabs < 0.5% 855 - 1100 nm: Tabs < 0.5%

unmounted	filter glass	ID	mounted	filter	ID
10 mm	IFG NBP 830-20 HT 10,0 2-0001	1085741	CMT	IF NBP 830-20 HT CMT	
19 mm	IFG NBP 830-20 HT 19,0 2-0001	1085742	SH 25.5	IF NBP 830-20 HT SH 25.5	1089188
22 mm	IFG NBP 830-20 HT 22,0 2-0001	1085743	SH 27.0	IF NBP 830-20 HT SH 27.0	1088647
24 mm	IFG NBP 830-20 HT 24,0 2-0001	1085744	SN1 30.5	IF NBP 830-20 HT SN1 30.5	1085805
27 mm	IFG NBP 830-20 HT 27,0 2-0001	1085745	SH 35.5	IF NBP 830-20 HT SH 35.5	
29 mm	IFG NBP 830-20 HT 29,0 2-0001	1085746	SH 37.0	IF NBP 830-20 HT SH 37.0	
34 mm	IFG NBP 830-20 HT 34,0 2-0001	1085747	SH 39.0	IF NBP 830-20 HT SH 39.0	
46 mm	IFG NBP 830-20 HT 46,0 2-0001	1085748	SH 40.5	IF NBP 830-20 HT SH 40.5	
55 mm	IFG NBP 830-20 HT 55,0 2-0001	1085749	SH 43.0	IF NBP 830-20 HT SH 43.0	
			SH 52.0	IF NBP 830-20 HT SH 52.0	

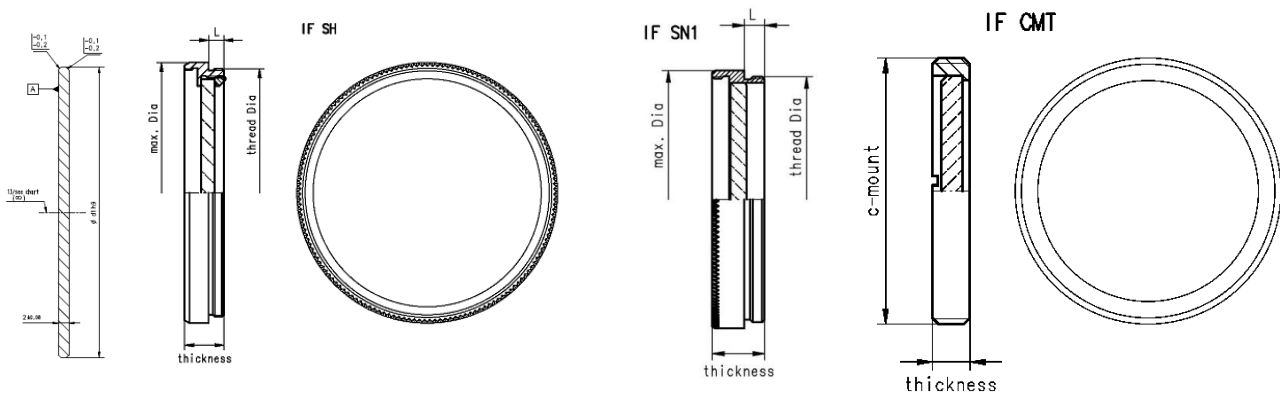
# Narrow Bandpass Filter

Next to the standard sizes we offer more on request.

Schneider-Kreuznach provides professional highly accurate  $\mu$  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 UV-IR cut filters and bandpass filters for broadband applications.

On request mounted filters are available in common filter thread sizes.



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