Data Sheet

SCHOTT

N-WG320

Reflection factor	
P_d	0.918

Reference thickness	
d [mm]	2

Spectral values guaranteed		
λ_c (τ_i = 0.5) [nm]	=	320 ± 6
λ_s ($\tau_{i,U}$ = 10^{-5}) [nm]	=	280
λ_p ($\tau_{i,L}$ = 0.99) [nm]	=	470

Refractive Index n
n_i (365.0 nm) = 1.540
n_d (587.6 nm) = 1.520
n_t (1014.0 nm) = 1.510

Density	
ρ [g/cm^3]	2.51

Bubble content	
Bubble class	1

Chemical Resistance	
FR class	0
SR class	1.0
AR class	2.0

Transformation temperature	
Tg [°C]	563

Thermal expansion	
$\alpha_{-30/+70°C}$ [10^{-6}/K]	7.1
$\alpha_{20/300°C}$ [10^{-6}/K]	8.4
$\alpha_{20/200°C}$ [10^{-6}/K]	

Temperature coefficient	
T_K [nm/°C]	0.06

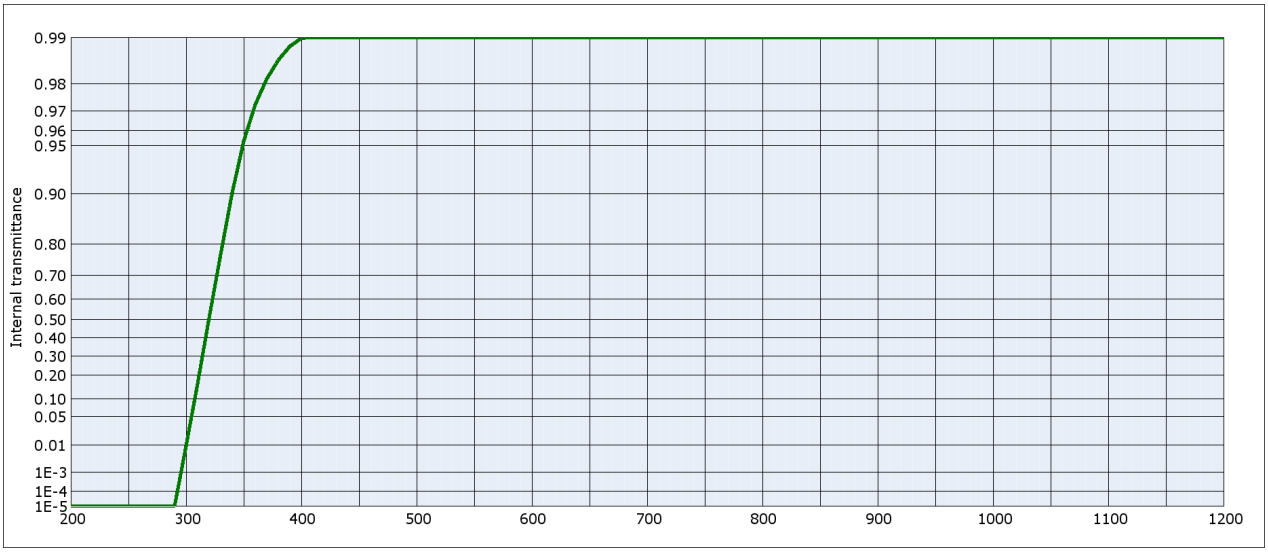
Notes
Base glass
Longpass filter
All data wihout tolerances are to be understood to be reference values. Guaranteed values are only those values listed in the section "Spectral values guaranteed".

Colorimetric evaluation

Illuminant	A (Planck T = 2856 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	Planck T = 3200 K		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			

Illuminant	D65 (T_C = 6504 K)		
d [mm]	1	2	3
x			
y			
Y			
λ_d [nm]			
P_e			



STATUS: 01.12.2014

Further explanations see 'Optical Filters 2013' catalogue

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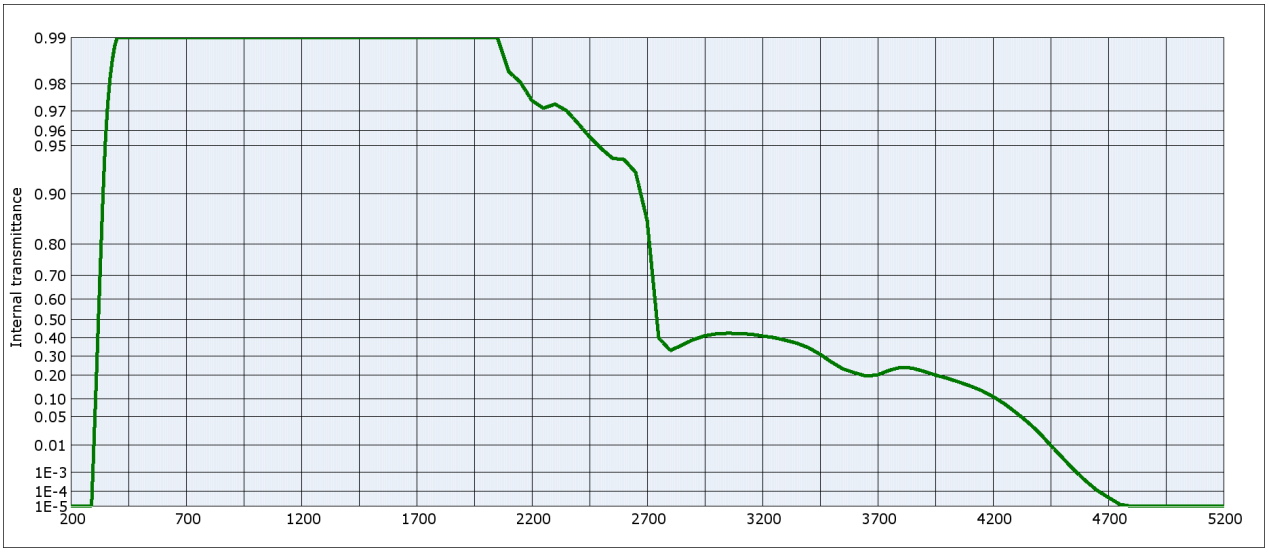

Internal transmittance τ_i at reference thickness d = 2 mm
The internal transmittance values, tabulated and graphically represented, are reference values only

λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i	λ [nm]	τ_i
200	$< 10^{-5}$	500	0.994	800	0.998	1100	1.000	2200	0.974	3700	0.202
210	$< 10^{-5}$	510	0.994	810	0.998	1110	1.000	2250	0.971	3750	0.225
220	$< 10^{-5}$	520	0.995	820	0.998	1120	1.000	2300	0.973	3800	0.240
230	$< 10^{-5}$	530	0.995	830	0.999	1130	1.000	2350	0.970	3850	0.236
240	$< 10^{-5}$	540	0.995	840	0.999	1140	1.000	2400	0.964	3900	0.220
250	$< 10^{-5}$	550	0.995	850	0.999	1150	1.000	2450	0.956	3950	0.201
260	$< 10^{-5}$	560	0.996	860	0.999	1160	1.000	2500	0.948	4000	0.186
270	$< 10^{-5}$	570	0.996	870	0.999	1170	1.000	2550	0.940	4050	0.169
280	$< 10^{-5}$	580	0.996	880	0.999	1180	1.000	2600	0.939	4100	0.152
290	$< 10^{-5}$	590	0.996	890	0.999	1190	1.000	2650	0.926	4150	0.132
300	$9.6 \cdot 10^{-3}$	600	0.996	900	0.999	1200	1.000	2700	0.854	4200	0.109
310	0.161	610	0.996	910	0.999	1250	1.000	2750	0.400	4250	$8.4 \cdot 10^{-2}$
320	0.507	620	0.997	920	0.999	1300	1.000	2800	0.330	4300	$6.0 \cdot 10^{-2}$
330	0.770	630	0.997	930	0.999	1350	1.000	2850	0.359	4350	$3.9 \cdot 10^{-2}$
340	0.901	640	0.997	940	0.999	1400	0.998	2900	0.390	4400	$2.2 \cdot 10^{-2}$
350	0.953	650	0.997	950	0.999	1450	1.000	2950	0.411	4450	$1.0 \cdot 10^{-2}$
360	0.973	660	0.997	960	0.999	1500	1.000	3000	0.422	4500	$4.0 \cdot 10^{-3}$
370	0.981	670	0.997	970	0.999	1550	1.000	3050	0.425	4550	$1.3 \cdot 10^{-3}$
380	0.986	680	0.997	980	0.999	1600	1.000	3100	0.424	4600	$4.1 \cdot 10^{-4}$
390	0.989	690	0.997	990	0.999	1650	1.000	3150	0.419	4650	$1.2 \cdot 10^{-4}$
400	0.990	700	0.997	1000	0.999	1700	1.000	3200	0.410	4700	$4.2 \cdot 10^{-5}$
410	0.991	710	0.998	1010	0.999	1750	0.999	3250	0.401	4750	$1.4 \cdot 10^{-5}$
420	0.991	720	0.998	1020	0.999	1800	0.998	3300	0.386	4800	$< 10^{-5}$
430	0.992	730	0.998	1030	0.999	1850	0.997	3350	0.370	4850	$< 10^{-5}$
440	0.992	740	0.998	1040	1.000	1900	0.996	3400	0.345	4900	$< 10^{-5}$
450	0.992	750	0.998	1050	1.000	1950	0.994	3450	0.309	4950	$< 10^{-5}$
460	0.993	760	0.998	1060	1.000	2000	0.993	3500	0.267	5000	$< 10^{-5}$
470	0.993	770	0.998	1070	1.000	2050	0.990	3550	0.231	5050	$< 10^{-5}$
480	0.993	780	0.998	1080	1.000	2100	0.983	3600	0.212	5100	$< 10^{-5}$
490	0.994	790	0.998	1090	1.000	2150	0.980	3650	0.196	5150	$< 10^{-5}$

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