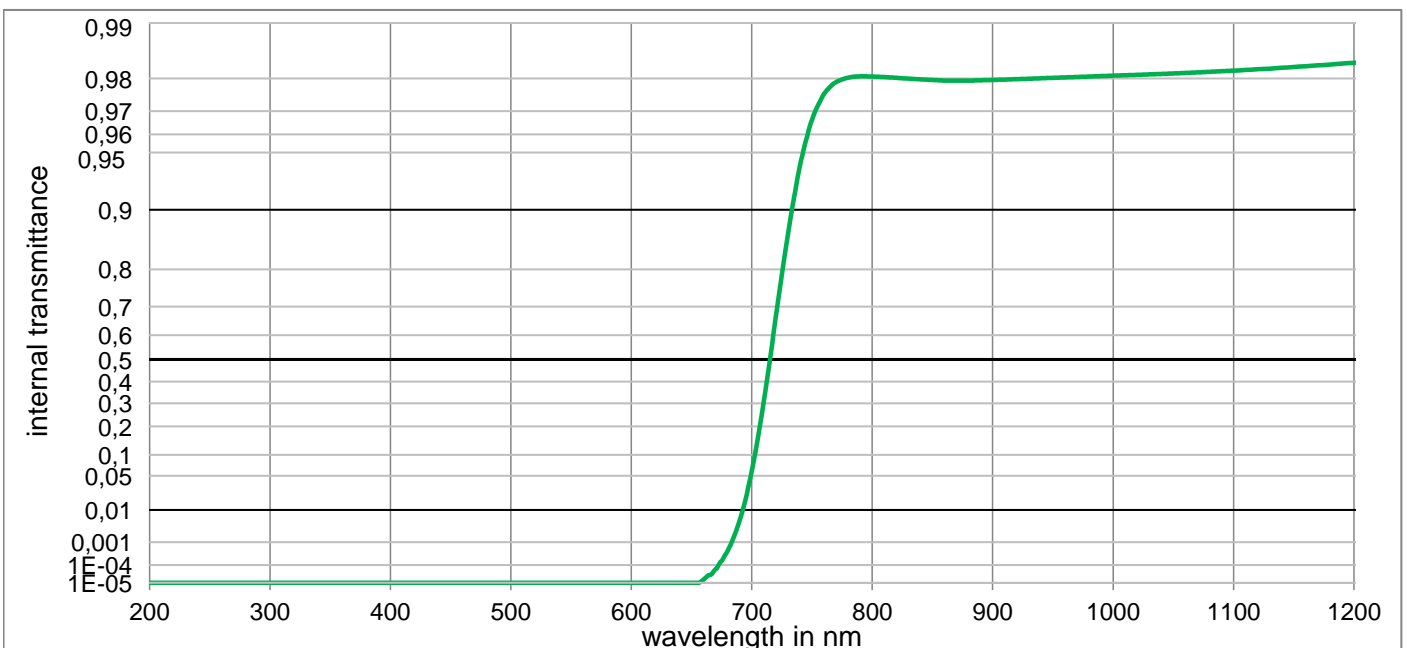
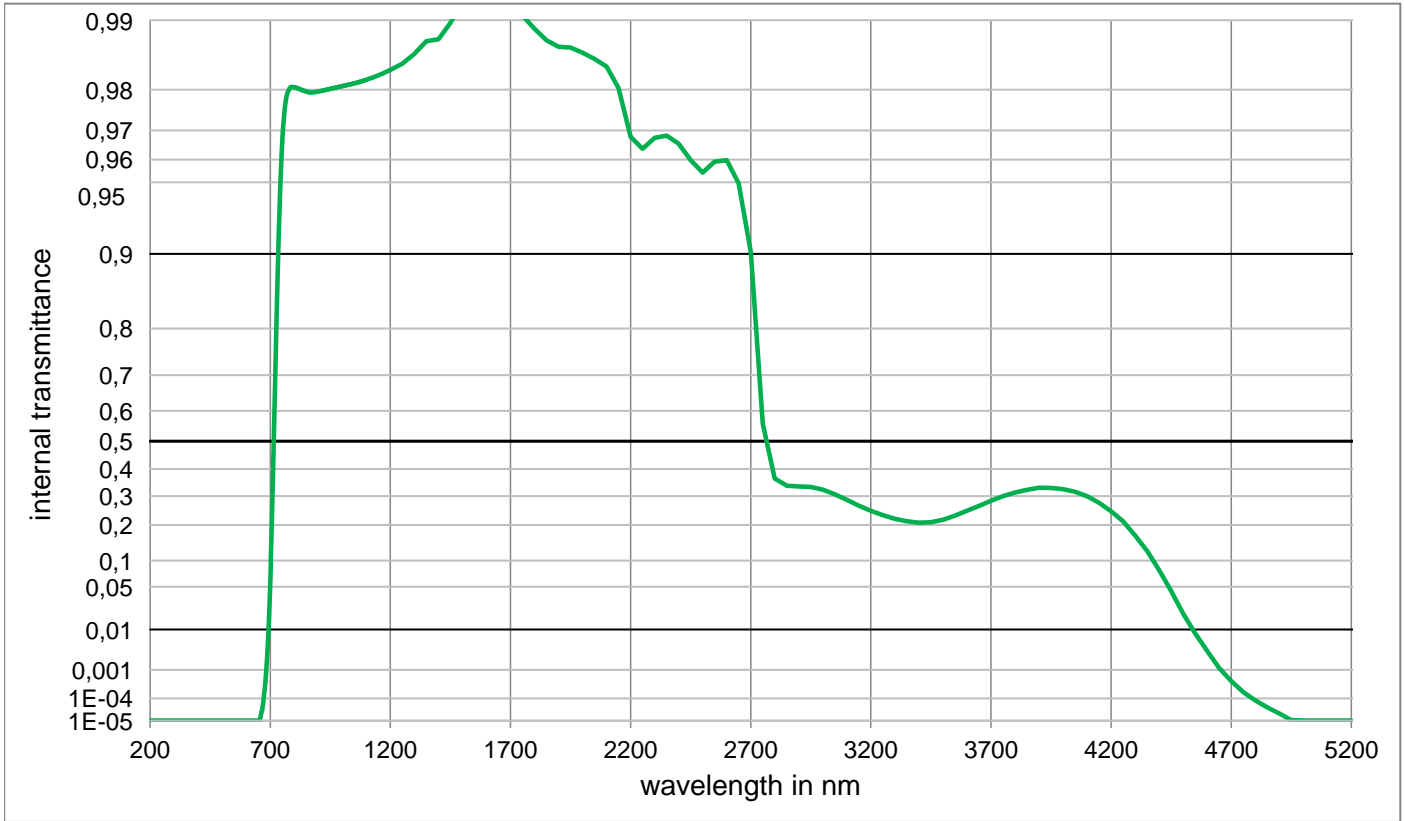


## RG715

Optical properties	Mechanical properties	Colorimetric properties
<b>Reflection factor</b>	<b>Reference thickness</b>	1 mm    2 mm    3 mm
$P_d = 0,914$	$d = 3,00 \text{ mm}$	Illuminant D65 x y Y $\lambda_d$ $P_e$
<b>Spectral values guaranteed (d = 3 mm)</b>	<b>Density</b>	
$\lambda_{i0,5} = 715 \text{ nm} \pm 9 \text{ nm}$	$\rho = 2,76 \text{ g/cm}^3$	
$\lambda_s (\tau_{i,U} = 1E-05) = 620 \text{ nm}$	<b>Knoop hardness</b>	
$\lambda_p (\tau_{i,L} = 0,96) = 810 \text{ nm}$	$HK_{[0.1/20]} = 545$	
		Illuminant A x y Y $\lambda_d$ $P_e$
	<b>Thermal properties</b>	
	<b>Transformation temperature</b>	
	$T_g = 532 \text{ }^\circ\text{C}$	
	<b>Thermal expansion in</b> $10^{-6}/\text{K}$	
<b>Refractive indices</b>	$\alpha_{(-30^\circ\text{C}/+70^\circ\text{C})} = 8,1$	<b>Notes</b>  Stricking glass Longpass filter   ISO 23364:2021  <b>Disclaimer</b> All data without tolerances are to be understood to be reference values.
$n_d (587,6 \text{ nm}) = 1,54$	$\alpha_{(20^\circ\text{C}/300^\circ\text{C})} = 9,4$	
$n_s (852 \text{ nm}) = 1,53$		
$n_t (1014 \text{ nm}) = 1,53$	<b>Temperature coefficient</b>	
	$Tk = 0,18 \text{ nm/K}$	
<b>Sellmeier coefficients</b>	<b>Chemical properties</b>	
valid from 440 nm to 1550 nm	<b>Chemical resistance</b>	
$B_1 = 0,8330$	FR class = 0	
$B_2 = 0,4883$	SR class = 1	
$B_3 = 6,5998$	AR class = 1	
$C_1 = 1,082E-02 \text{ } \mu\text{m}^2$	<b>Resistance against humidity</b>	
$C_2 = 1,1301E-02 \text{ } \mu\text{m}^2$	Resistant glass	
$C_3 = 855,262 \text{ } \mu\text{m}^2$	see pocket catalogue "Optical Filter Glass 2024", chapter 5.5	
<b>Internal quality</b>		
Bubble class 3		



## RG715



**Internal transmittance  $\tau_i$  at reference thickness**  
 The internal transmittance values, tabulated and graphically represented, are reference values only

$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$	$\lambda$ /nm	$\tau_i$
200	< 1,0E-05	500	< 1,000E-05	800	9,805E-01	1100	9,819E-01	2200	9,680E-01	3700	2,827E-01
210	< 1,0E-05	510	< 1,000E-05	810	9,804E-01	1110	9,820E-01	2250	9,641E-01	3750	2,995E-01
220	< 1,0E-05	520	< 1,000E-05	820	9,802E-01	1120	9,822E-01	2300	9,678E-01	3800	3,127E-01
230	< 1,0E-05	530	< 1,000E-05	830	9,800E-01	1130	9,823E-01	2350	9,684E-01	3850	3,232E-01
240	< 1,0E-05	540	< 1,000E-05	840	9,798E-01	1140	9,825E-01	2400	9,658E-01	3900	3,305E-01
250	< 1,0E-05	550	< 1,000E-05	850	9,796E-01	1150	9,827E-01	2450	9,598E-01	3950	3,302E-01
260	< 1,0E-05	560	< 1,000E-05	860	9,795E-01	1160	9,828E-01	2500	9,545E-01	4000	3,252E-01
270	< 1,0E-05	570	< 1,000E-05	870	9,794E-01	1170	9,830E-01	2550	9,592E-01	4050	3,154E-01
280	< 1,0E-05	580	< 1,000E-05	880	9,795E-01	1180	9,832E-01	2600	9,597E-01	4100	2,993E-01
290	< 1,0E-05	590	< 1,000E-05	890	9,795E-01	1190	9,834E-01	2650	9,495E-01	4150	2,758E-01
300	< 1,0E-05	600	< 1,000E-05	900	9,796E-01	1200	9,836E-01	2700	9,017E-01	4200	2,464E-01
310	< 1,0E-05	610	< 1,000E-05	910	9,797E-01	1250	9,846E-01	2750	5,597E-01	4250	2,120E-01
320	< 1,000E-05	620	< 1,000E-05	920	9,798E-01	1300	9,860E-01	2800	3,653E-01	4300	1,666E-01
330	< 1,000E-05	630	< 1,000E-05	930	9,799E-01	1350	9,877E-01	2850	3,378E-01	4350	1,238E-01
340	< 1,000E-05	640	< 1,000E-05	940	9,801E-01	1400	9,879E-01	2900	3,356E-01	4400	7,960E-02
350	< 1,000E-05	650	< 1,000E-05	950	9,802E-01	1450	9,897E-01	2950	3,336E-01	4450	4,376E-02
360	< 1,000E-05	660	1,589E-05	960	9,803E-01	1500	9,917E-01	3000	3,236E-01	4500	1,980E-02
370	< 1,000E-05	670	6,257E-05	970	9,804E-01	1550	9,927E-01	3050	3,067E-01	4550	8,430E-03
380	< 1,000E-05	680	4,487E-04	980	9,805E-01	1600	9,932E-01	3100	2,864E-01	4600	3,292E-03
390	< 1,000E-05	690	5,351E-03	990	9,806E-01	1650	9,929E-01	3150	2,660E-01	4650	1,132E-03
400	< 1,000E-05	700	5,900E-02	1000	9,807E-01	1700	9,919E-01	3200	2,477E-01	4700	4,375E-04
410	< 1,000E-05	710	3,110E-01	1010	9,808E-01	1750	9,905E-01	3250	2,325E-01	4750	1,791E-04
420	< 1,000E-05	720	6,665E-01	1020	9,809E-01	1800	9,891E-01	3300	2,202E-01	4800	8,337E-05
430	< 1,000E-05	730	8,663E-01	1030	9,810E-01	1850	9,878E-01	3350	2,120E-01	4850	4,236E-05
440	< 1,000E-05	740	9,410E-01	1040	9,811E-01	1900	9,869E-01	3400	2,072E-01	4900	2,218E-05
450	< 1,000E-05	750	9,666E-01	1050	9,812E-01	1950	9,869E-01	3450	2,093E-01	4950	1,076E-05
460	< 1,000E-05	760	9,757E-01	1060	9,813E-01	2000	9,862E-01	3500	2,171E-01	5000	< 1,000E-05
470	< 1,000E-05	770	9,791E-01	1070	9,815E-01	2050	9,853E-01	3550	2,313E-01	5050	< 1,000E-05
480	< 1,000E-05	780	9,802E-01	1080	9,816E-01	2100	9,841E-01	3600	2,476E-01	5100	< 1,000E-05
490	< 1,000E-05	790	9,805E-01	1090	9,817E-01	2150	9,803E-01	3650	2,649E-01	5150	< 1,000E-05