

Type	VERIL S 60	VERIL S 200	VERIL BL 200
Kind of filter	Linear variable line filter	Linear variable line filter	Linear variable band filter
Corresponding kind of homogeneous filter	Line filter	Line filter	Band filter
Design analog	KMZ 12	KMZ 12	KMZ 40
Spectral range of λ_m [nm]	400 – 700	400 – 700	400 – 1000
Spectrum length [nm]	38 – 50	112 – 135	132 – 165
Reciprocal linear dispersion [nm/mm]	6.2 – 7.5	2.2 – 7.6	3.6 – 4.4
Spectral values			
Half width HW [nm]	10–16 ($\lambda_m = 450$ nm) 10–15 ($\lambda_m = 550$ nm) 10–18 ($\lambda_m = 650$ nm)	10–16 ($\lambda_m = 450$ nm) 10–15 ($\lambda_m = 550$ nm) 10–18 ($\lambda_m = 650$ nm)	25–45 ($\lambda_m = 500$ nm) 35–50 ($\lambda_m = 700$ nm) 40–65 ($\lambda_m = 900$ nm)
Maximum spectral transmittance τ_{max} within passband	≥ 0.35 ($\lambda_m = 450$ nm) ≥ 0.45 ($\lambda_m = 550$ nm) ≥ 0.40 ($\lambda_m = 650$ nm)	≥ 0.35 ($\lambda_m = 450$ nm) ≥ 0.45 ($\lambda_m = 550$ nm) ≥ 0.40 ($\lambda_m = 650$ nm)	≥ 0.40 ($\lambda_m = 500$ nm) ≥ 0.40 ($\lambda_m = 700$ nm) ≥ 0.30 ($\lambda_m = 900$ nm)
$Q = \frac{\text{tenth width}}{\text{half width}}$	approx. 1.8	approx. 1.8	approx. 1.8
$q = \frac{\text{thousandth width}}{\text{half width}}$	approx. 6	approx. 6	approx. 6
Blocking range [nm]	up to $2 \cdot \lambda_m^{1)}$	up to $2 \cdot \lambda_m^{1)}$	unlimited
Average value τ_{sm} of spectral transmittance within blocking range	$\leq 10^{-4}$	$\leq 10^{-4}$	$\leq 10^{-4}$
Preferred dimensions [nm]			
Length	60 +0/–0.3	200 +0/–0.3	200 +0/–0.3
Width	25 +0/–0.3	25 +0/–0.3	25 +0/–0.3
Thickness	≤ 5	≤ 6	≤ 6
Other properties			
Humidity resistance of filters with preferred dimensions	MIL-Std-810 C, method 507, proc. 1 : 5 cycles		
Operating temperature	up to 70 °C for several hours up to 100 °C for short periods		
Notes	¹⁾ On request, unlimited blocking range by additional blocking filters. However, slight reduction of τ_{max} and noticeable differing transmittance on both sides of joint. Thickness increased by max. 4 mm. Fit filters with mirror side facing light source.		

Table 13: Specifications of linear variable interference filter types VERIL