

**Line filters**  
**Spectral range**  
**400 nm to 800 nm**

Type	MAD 8 (3 cavities)
$\lambda_m$ -tolerance [% of $\lambda_m$ ]	$\pm 1$
Available with $\lambda_m$ in range [nm]	400–800
<b>Spectral values</b>	
Half width HW [nm]	6–12 ( $\lambda_m$ from 400 nm to 800 nm)
Maximum spectral transmittance $\tau_{\max}$ within passband	$\geq 0.30$ ( $\lambda_m$ from 400 nm to 429 nm) $\geq 0.45$ ( $\lambda_m$ from 430 nm to 800 nm)
$Q = \frac{\text{tenth width}}{\text{half width}}$	approx. 1.5
$q = \frac{\text{thousandth width}}{\text{half width}}$	approx. 3
Blocking range [nm]	unlimited
Average value $\tau_{SM}$ of spectral transmittance within blocking range	$\leq 10^{-5}$
<b>Other properties</b>	
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
Temperature dependence of $\lambda_m$ $\Delta\lambda_m/\Delta T$ [nm/°C]	approx. +0.02
Notes	Fit filters with mirror side facing light source.

Table 6: Specifications of filter type MAD 8

Preferred dimensions [mm]	
External dimensions	Dimensions of utilizable area
$\varnothing 12 +0/-0.3$	$\varnothing \geq 9$
$\varnothing 25 +0/-0.3$	$\varnothing \geq 22$
$\varnothing 50 +0/-0.3$	$\varnothing \geq 47$
$\square 50 +0/-0.3$	$\square \geq 47$
Thickness	$\leq 7$
Other dimensions on request	

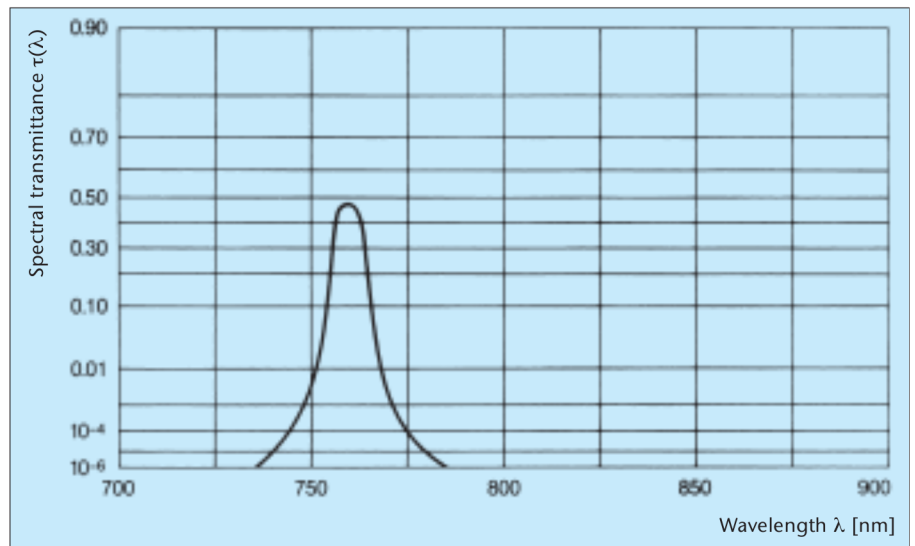


Fig. 14: Spectral transmittance curve (general curve) of filter type MAD 8