



Interferometric Optics

Multiple-Prism Beam Expanders[†]

M	Number of Prisms	Prism Material	Transmission Efficiency ^{††}	Dispersion	Physical Length ^{†††}
25	2	Fused silica	~ 50%	$\nabla_{\lambda}\theta = 0$ at 590 nm ^{††††}	~20 mm
100	4	Fused silica	~ 44%	$\nabla_{\lambda}\theta = 0$ at 308 nm ^{††††}	~50 mm
100	4	BK-7	~ 45%	$\nabla_{\lambda}\theta = 0$ at 590 nm ^{††††}	~50 mm

[†] Detailed angular deployment position of each prism supplied. All beam incidence and beam exit prisms surfaces polished to $\lambda/4$. All prism angles are specified within ± 30 arc sec.

^{††} Calculated for polarization parallel to the plane of propagation. Transmission efficiency can be significantly improved using antireflection coatings.

^{†††} Assumes an original unexpanded beam diameter of 200 μ m. All prisms designed for a 10 mm height.

^{††††} Quoted dispersion is for deployment in a compensating configuration. Large dispersion values can be obtained by deploying the prisms in an additive configuration.

Note: special designs, for specific M factors and optical materials, are available up on request. Price does not include tax or delivery.

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