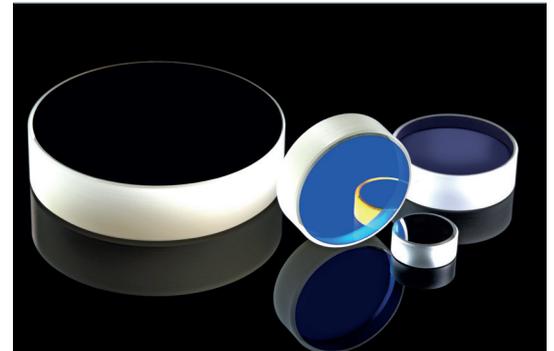


Nd:YAG Laser Line Mirrors

HR Laser Line Mirrors for Nd:YAG and their harmonics

For Nd:YAG Laser 1064nm and their harmonics 532nm, 355nm and 266nm, Materion Balzers Optics provides high reflective laser line mirrors with an LiDT $>50\text{J}/\text{cm}^2$ at 1064 nm (10ns pulses). The Nd:YAG laser line mirrors are offered for 0° and 45° application. The high level threshold and the reflectivity of $R > 99.5\%$ for s- and p-polarized light, makes them well suitable for all industrial $2\frac{1}{7}$ application. Standard dimensions are $\frac{1}{2}$ " and 1". Other, customized dimensions, available upon request.



Benefits

- Useable for laser lines Nd:YAG: 1064/532/355/266nm
- Standard reflectivity $>99.7\%$ for s- and p-pol
- Optimized reflectivity $>99.9\%$
- High power laser application from ns down to fs range
- Angle of incidence: 0° or 45°
- Low losses and scattering because of substrate surface accuracy $\text{RMS} < 2\text{\AA}$
- Excellent long term stability

Applications

- Laser-Beam manipulation
- Laser material processing systems
- Laser marking

Overview LiDT Value

Wavelength	Damage Threshold	Repetition rate
1064nm	$>50\text{J}/\text{cm}^2$	10ns
532nm	$>20\text{J}/\text{cm}^2$	10ns
355nm	$>15\text{J}/\text{cm}^2$	5ns
266nm	$>7\text{J}/\text{cm}^2$	4.5ns

Technical Data

Wavelength	1064nm / 532nm / 355nm / 266nm
Reflectance	$>99.5\%$ for any polarization
Angle of Incidence	0° or 45° (customizes upon request)
Flatness	L / 10
Surface Quality	10 – 5
Dimensions	12.7(0/-0.1)mm \times 6.35(\pm 0.1)mm; 25.4(0/-0.1)mm \times 6.35(\pm 0.1)mm (others on request)
Substrate	UV Fused Silica
Parallelism	<5 arcmin

Order information

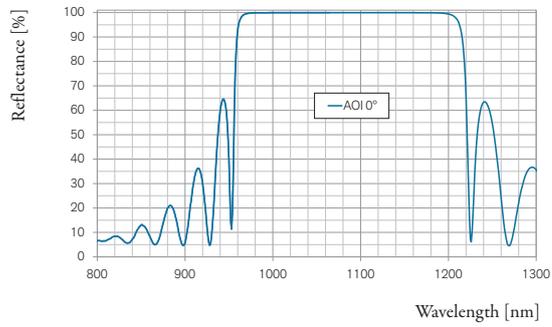
wave-length	size	AOI 0°	AOI 45°
1064nm	$\text{\O}12.7 \times 6.35\text{mm}$	part.: J206869	part.: J206871
	$\text{\O}25.4 \times 6.35\text{mm}$	part.: J206870	part.: J206872
532nm	$\text{\O}12.7 \times 6.35\text{mm}$	part.: J206873	part.: J206875
	$\text{\O}25.4 \times 6.35\text{mm}$	part.: J206874	part.: J206876
355nm	$\text{\O}12.7 \times 6.35\text{mm}$	part.: J206877	part.: J206879
	$\text{\O}25.4 \times 6.35\text{mm}$	part.: J207010	part.: J207012
266nm	$\text{\O}12.7 \times 6.35\text{mm}$	part.: J207013	part.: J207015
	$\text{\O}25.4 \times 6.35\text{mm}$	part.: J207014	part.: J207016



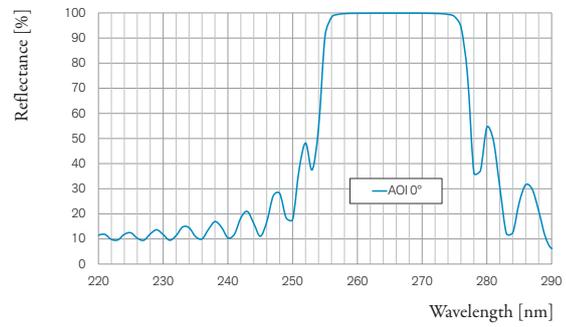
MATERION

// BALZERS OPTICS

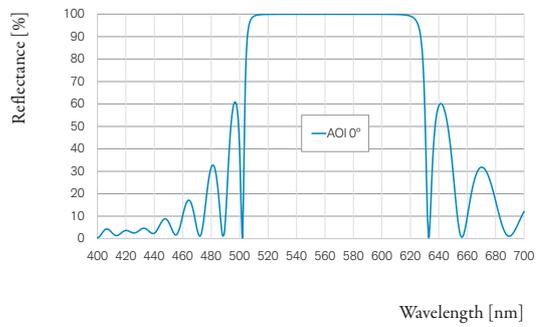
Spectral curve Mirror Nd:YAG HR1064nm



Spectral curve Mirror Nd:YAG HR266nm



Spectral curve Mirror Nd:YAG HR532nm



Spectral curve Mirror Nd:YAG HR355nm

