

Nd:YAG Laser Optics

LASER MIRRORS

Our Nd:YAG laser mirrors are suitable for fundamental Nd:YAG laser 1064 nm, frequency-doubled 532 nm, frequency-tripled 355 nm and frequency quadrupled 266 nm wavelength application. Two kinds of substrate material are available. Laser line mirrors are designed for 45°

angle of incidence. Featuring high polishing quality, low scattering and high damage threshold, our dielectric reflectors enables perfect beam steering for Nd:YAG lasers.

SUBSTRATE

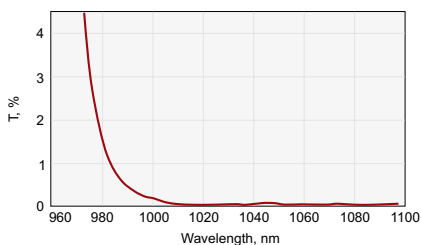
Material	UV grade Fused Silica or BK7 glass
S1 Surface Flatness	$\lambda/10$ at 633 nm
S1 Surface Quality	20–10 scratch & dig (MIL-PRF-13830B)
S2 Surface Quality	Commercial polish
Diameter Tolerance	+0.00 mm -0.12 mm
Thickness Tolerance	± 0.25 mm
Wedge	< 3 min
Chamfer	0.3 mm at 45° typical

COATING

Technology	Electron beam multilayer dielectric or Ion Beam Sputtering
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Damage Threshold:	
BK7 laser line mirrors	5 J/cm ² , 8 nsec pulse, 1064 nm typical
UV FS laser line mirrors	8 J/cm ² , 8 nsec pulse, 1064 nm typical
BK7 dual line mirrors	1 J/cm ² , 8 nsec pulse, 1064 nm typical
UV FS dual line mirrors	2 J/cm ² , 8 nsec pulse, 1064 nm typical
Coated Surface Flatness	$\lambda/10$ at 633 nm over clear aperture
Angle of Incidence	0 or 45°

LASER LINE MIRRORS

Substrate material: **BK7 grade A**

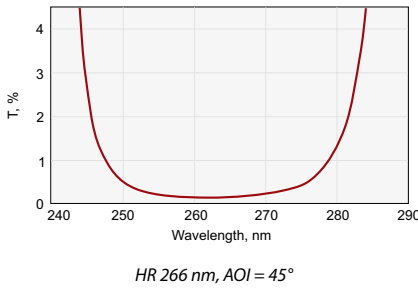


HR 1064 nm, AOI = 45°

Wavelength, nm	AOI=0°			AOI=45°		
	R, % (s+p)/2	Catalogue number	Price, EUR	R, % (s+p)/2	Catalogue number	Price, EUR
SIZE – Ø12.7 × 3 mm						
351–361	99.7	031-0350-i0	59	99.5	031-0350	59
527–532	99.7	031-0530-i0	56	99.5	031-0530	56
1047–1064	99.7	031-1060-i0	57	99.5	031-1060	57
SIZE – Ø12.7 × 6 mm						
351–361	99.7	031-0350T6-i0	59	99.5	031-0350T6	59
527–532	99.7	031-0530T6-i0	56	99.5	031-0530T6	56
1047–1064	99.7	031-1060T6-i0	57	99.5	031-1060T6	57
SIZE – Ø25.4 × 6 mm						
351–361	99.7	032-0350-i0	90	99.5	032-0350	90
527–532	99.7	032-0530-i0	74	99.5	032-0530	74
1047–1064	99.7	032-1060-i0	75	99.5	032-1060	75
SIZE – Ø50.8 × 8 mm						
351–361	99.7	035-0350-i0	128	99.5	035-0350	128
527–532	99.7	035-0530-i0	110	99.5	035-0530	110
1047–1064	99.7	035-1060-i0	110	99.5	035-1060	110
SIZE – Ø76.2 × 12.7 mm						
527–532	99.7	037-0530-i0	185	99.5	037-0530	185
1047–1064	99.7	037-1060-i0	185	99.5	037-1060	185

LASER LINE MIRRORS

Substrate material: **UV grade Fused Silica**



Wavelength, nm	AOI=0°			AOI=45°		
	R, % (s+p)/2	Catalogue number	Price, EUR	R, % (s+p)/2	Catalogue number	Price, EUR

SIZE – Ø12.7 × 3 mm

262–266	99	041-0260-i0	71	99	041-0260	71
351–361	99.7	041-0350-i0	67	99.5	041-0350	67
527–532	99.7	041-0530-i0	62	99.5	041-0530	62
1047–1064	99.7	041-1060-i0	62	99.5	041-1060	62

SIZE – Ø12.7 × 6 mm

262–266	99	041-0260T6-i0	71	99	041-0260T6	71
351–361	99.7	041-0350T6-i0	67	99.5	041-0350T6	67
	99.9	041-0350T6HHR-i0	110	99.9	041-0350T6HHR	110
527–532	99.7	041-0530T6-i0	62	99.5	041-0530T6	62
	99.9	041-0530T6HHR-i0	75	99.9	041-0530T6HHR	75
1047–1064	99.7	041-1060T6-i0	62	99.5	041-1060T6	62
	99.9	041-1060T6HHR-i0	75	99.9	041-1060T6HHR	75

SIZE – Ø25.4 × 6 mm

262–266	99	042-0260-i0	99	99	042-0260	99
351–361	99.7	042-0350-i0	95	99.5	042-0350	95
	99.9	042-0350HHR-i0	130	99.9	042-0350HHR	130
527–532	99.7	042-0530-i0	90	99.5	042-0530	90
	99.9	042-0530HHR-i0	105	99.9	042-0530HHR	105
1047–1064	99.7	042-1060-i0	90	99.5	042-1060	90
	99.9	042-1060HHR-i0	105	99.9	042-1060HHR	105

SIZE – Ø50.8 × 8 mm

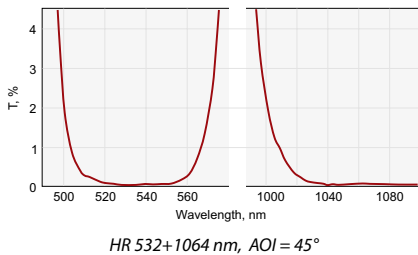
262–266	99	045-0260-i0	207	99	045-0260	207
351–361	99.7	045-0350-i0	187	99.5	045-0350	187
527–532	99.7	045-0530-i0	169	99.5	045-0530	169
1047–1064	99.7	045-1060-i0	169	99.5	045-1060	169

SIZE – Ø76.2 × 12.7 mm

351–361	99.7	047-0350-i0	281	99.5	047-0350	281
527–532	99.7	047-0530-i0	258	99.5	047-0530	258
1047–1064	99.7	047-1060-i0	258	99.5	047-1060	258

DUAL BAND MIRRORS

Substrate material: **BK7 grade A**



Wavelength, nm	AOI=0°			AOI=45°		
	R, % (s+p)/2	Catalogue number	Price, EUR	R, % (s+p)/2	Catalogue number	Price, EUR

SIZE – Ø12.7 × 3 mm

532+1064	99.7	051-5306-i0	85	99.5	051-5306	85
633+1064	99.7	051-6306-i0	85	99.5	051-6306	85

SIZE – Ø12.7 × 6 mm

532+1064	99.7	051-5306T6-i0	85	99.5	051-5306T6	85
633+1064	99.7	051-6306T6-i0	85	99.5	051-6306T6	85

SIZE – Ø25.4 × 6 mm

532+1064	99.7	052-5306-i0	103	99.5	052-5306	103
633+1064	99.7	052-6306-i0	103	99.5	052-6306	103

SIZE – Ø50.8 × 8 mm

532+1064	99.7	055-5306-i0	151	99.5	055-5306	151
633+1064	99.7	055-6306-i0	151	99.5	055-6306	151

SIZE – Ø76.2 × 12.7 mm

532+1064	99.7	057-5306-i0	227	99.5	057-5306	227
633+1064	99.7	057-6306-i0	227	99.5	057-6306	227

RELATED PRODUCTS

Prisms *See page 1.51*

Kinematic Mirror/Beamsplitter Mounts 840-0056

Find more at EksmaOptics.com

