LASER LINE ANTI-REFLECTION COATED PRECISION WINDOWS

- **Made of premium quality UV FS and BK7**
- **AR coated at 266 nm, 355 nm, 532 nm, 1064 nm**

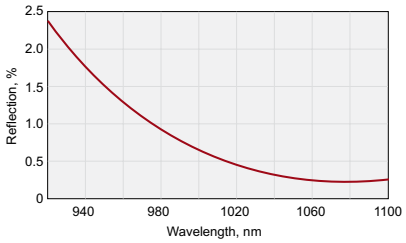
Precision windows are mostly used in laser systems. High quality AR multilayer coatings are applied on windows for fundamental Nd:YAG laser 1064 nm, frequency-doubled 532 nm, frequency-tripled 355nm and frequency-quadrupled 266nm applications. Featuring high optical transmission with little distortion of the transmitted signal, precision windows are a good solution for applications that require protective windows.

SPECIFICATIONS

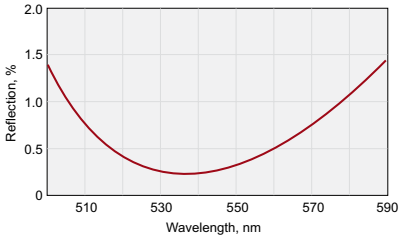
Material	BK7, UV FS
Surface quality	20-10 scratch & dig (MIL-PRF-13830B)
Clear aperture	90% of the diameter
Diameter tolerance	+0.00-0.12 mm
Thickness tolerance	±0.2 mm
Surface flatness	λ/10@633 nm
Parallelism	30 arcsec or 3 arcsec

COATING

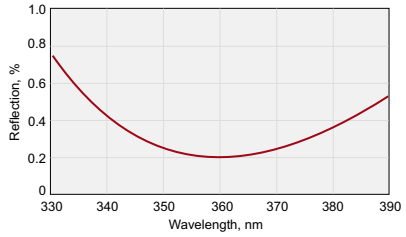
Technology	Electron beam multilayer dielectric
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Damage Threshold:	
BK7	>5 J/cm², 8 nsec pulse, 1064 nm
UV FS	>10 J/cm², 8 nsec pulse, 1064 nm
Angle of Incidence	0 degrees
Coated Surface Flatness	λ/10 at 633 nm over clear aperture



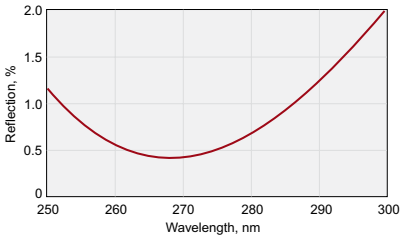
R<0.25%@1064 nm AOI=0°



R<0.25%@532 nm AOI=0°



R<0.25%@355 nm, AOI=0°



R<0.4%@266 nm, AOI=0°

Parallelism 30 arcsec

Catalogue number BK7	Catalogue number UV FS	Wavelength, nm	Diameter D, mm Metric	Diameter D, mm English	Thickness T, mm	Price, EUR BK7 / UV FS
–	224-1101	266	12.5	12.7	3.0	– / 98
–	223-1101	355	12.5	12.7	3.0	– / 92
222-0101	222-1101	532	12.5	12.7	3.0	56 / 87
221-0101	221-1101	1064	12.5	12.7	3.0	56 / 87
–	224-1201	266	25.0	25.4	6.0	– / 124
–	223-1201	355	25.0	25.4	6.0	– / 118
222-0201	222-1201	532	25.0	25.4	6.0	66 / 113
221-0201	221-1201	1064	25.0	25.4	6.0	66 / 113
–	224-1402	266	40.0	38.1	8.0	– / 178
–	223-1402	355	40.0	38.1	8.0	– / 172
222-0402	222-1402	532	40.0	38.1	8.0	86 / 167
221-0402	221-1402	1064	40.0	38.1	8.0	86 / 167
–	224-1502	266	50.0	50.8	10.0	– / 216
–	223-1502	355	50.0	50.8	10.0	– / 210
222-0502	222-1502	532	50.0	50.8	10.0	99 / 205
221-0502	221-1502	1064	50.0	50.8	10.0	99 / 205

Parallelism 3 arcsec

Catalogue number BK7	Catalogue number UV FS	Wavelength, nm	Diameter D, mm Metric	Diameter D, mm English	Thickness T, mm	Price, EUR BK7 / UV FS
–	224-1103	266	12.5	12.7	3.0	– / 107
–	223-1103	355	12.5	12.7	3.0	– / 101
222-0103	222-1103	532	12.5	12.7	3.0	70 / 96
221-0103	221-1103	1064	12.5	12.7	3.0	70 / 96
–	224-1203	266	25.0	25.4	6.0	– / 139
–	223-1203	355	25.0	25.4	6.0	– / 133
222-0203	222-1203	532	25.0	25.4	6.0	93 / 128
221-0203	221-1203	1064	25.0	25.4	6.0	93 / 128
–	224-1403	266	40.0	38.1	10.0	– / 195
–	223-1403	355	40.0	38.1	10.0	– / 189
222-0403	222-1403	532	40.0	38.1	10.0	121 / 184
221-0403	221-1403	1064	40.0	38.1	10.0	121 / 184
–	224-1503	266	50.0	50.8	12.0	– / 241
–	223-1503	355	50.0	50.8	12.0	– / 235
222-0503	222-1503	532	50.0	50.8	12.0	148 / 230
221-0503	221-1503	1064	50.0	50.8	12.0	148 / 230

RELATED PRODUCTS

Uncoated Precision Windows

See page 1.10

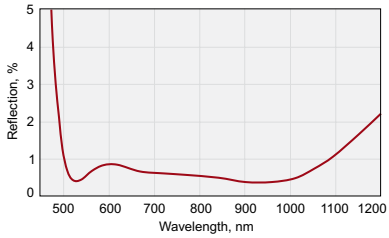
AR COATED LENS KITS

The lens kits consist of four basic types of lenses with various focal lengths. Focal lengths of plano-concave lenses range from -50 to -300 mm, biconcave lenses from -25 to -200. Plano-convex and biconvex lenses cover a focal distance from 25 to 1000 mm. The lenses are 25.4 diameter. Kits are available with multilayer anti-reflection coatings for Nd:YAG laser fundamental and harmonics wavelength: 266 nm or 355 nm or 532 nm or 1064 nm. Lenses are placed in a hardwood box. Size of the box is 30×7×40 cm (W×H×D).

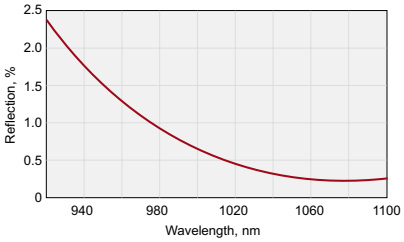
The lens kits are available from two kinds of substrate material:

- BK7 lens kit includes 40 lenses
- UV FS lens kit includes 36 lenses.

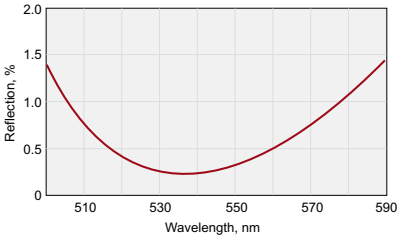
Code	Material	Coating	Price, EUR
140-0237	BK7	AR@500-1100 nm	2100
140-0239	BK7	AR@532+1064 nm	2000
141-0240	BK7	AR@1064 nm	1900
142-0240	BK7	AR@532 nm	1900
140-1237	UV FS	AR@500-1100 nm	2950
140-1239	UV FS	AR@532+1064 nm	2850
141-1236	UV FS	AR@1064 nm	2750
142-1236	UV FS	AR@532 nm	2750
143-1236	UV FS	AR@355 nm	2870
144-1236	UV FS	AR@266 nm	2960



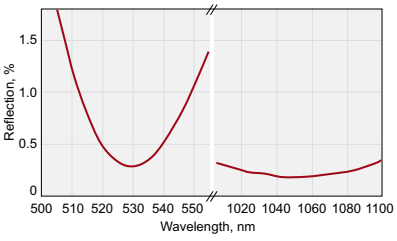
R<1.5%@500-1100 nm, AOI=0°



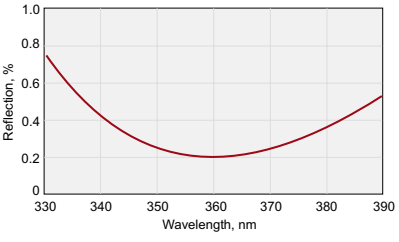
R<0.25%@1064 nm AOI=0°



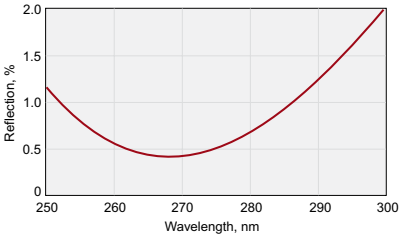
R<0.25%@532 nm AOI=0°



R<0.5%@532 nm+1064 nm, AOI=0°



R<0.25%@355 nm, AOI=0°



R<0.4%@266 nm, AOI=0°