

Mirrors

COATINGS

WINDOWS & FILTERS

MIRRORS

LENSES

PRISMS

POLARIZING OPTICS

UV & IR OPTICS

LASER MIRRORS

Laser mirrors are dielectric reflectors providing an optimised performance at stated wavelengths. High polishing quality is important for low wave front distortion, low scattering and high laser damage threshold. Mirrors are designed to work at 0 or 45 degrees.

SUBSTRATE

Material	UV grade fused silica or BK7 glass
S1 Surface Flatness	$\lambda/10$ typical 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
Coated Surface Flatness	$\lambda/10$ at 633 nm over 85% of diameter available
Angle of Incidence	0 or 45°

LASER LINE MIRRORS

Substrate material: BK7, grade A. AOI = 45°. Laser damage threshold: 6 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Price, EUR	Ø25.4 × 6 mm		Ø50.8 × 8 mm	
			Catalogue nr.			Catalogue nr.	Price, EUR	Catalogue nr.	Price, EUR
351 – 361	Nd:YAG 3H	99.5	031-0350	031-0350T6	59	032-0350	90	035-0350	128
380 – 420	Ti: Sa 2H	99.5	031-0400	031-0400T6	57	032-0400	89	035-0400	133
442	HeCd	99.5	031-0442	031-0442T6	57	032-0442	83	035-0442	133
488 – 515	Ar+	99.5	031-0490	031-0490T6	57	032-0490	83	035-0490	133
500 – 530	Yb:KGW/KYW 2H	99.5	031-0515	031-0515T6	56	032-0515	74	035-0515	110
527 – 532	Nd:YAG 2H	99.5	031-0530	031-0530T6	56	032-0530	74	035-0530	110
589	Dye	99.5	031-0590	031-0590T6	56	032-0590	82	035-0590	122
633 – 670	HeNe+Diode	99.5	031-0630	031-0630T6	56	032-0630	75	035-0630	122
694	Ruby	99.5	031-0694	031-0694T6	56	032-0694	75	035-0694	122
760 – 840	Ti:Sa 1H	99.5	031-0800	031-0800T6	61	032-0800	85	035-0800	133
780	Diode	99.5	031-0780	031-0780T6	57	032-0780	83	035-0780	122
852	Diode	99.5	031-0850	031-0850T6	57	032-0850	83	035-0850	133
980	Diode	99.5	031-0980	031-0980T6	57	032-0980	83	035-0980	122
1000 – 1060	Yb:KGW/KYW 1H	99.5	031-1030	031-1030T6	57	032-1030	75	035-1030	110
1047 – 1064	Nd:YAG 1H	99.5	031-1060	031-1060T6	57	032-1060	75	035-1060	110
1300 – 1320	YAG	99.5	031-1300	031-1300T6	61	032-1300	85	035-1300	137
1520 – 1570	Diode	99.5	031-1550	031-1550T6	61	032-1550	90	035-1550	139

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. Reflectivity R (s+p)/2 for AOI=0° is 99.8%.

The examples:
031-0350-i0, 037-0400-i0.

BK7 Ø76.2x12.7 mm. AOI = 45°. Laser damage threshold: 6 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Catalogue number	Price, EUR
380 – 420	Ti: Sa 2H	99.5	037-0400	199
500 – 530	Yb:KGW/KYW 2H	99.5	037-0515	185
527 – 532	Nd:YAG 2H	99.5	037-0530	185
760 – 840	Ti: Sa 1H	99.5	037-0800	199
1000 – 1060	Yb:KGW/KYW 3H	99.5	037-1030	185
1047 – 1064	Nd:YAG 1H	99.5	037-1060	185

Substrate material: UV grade Fused Silica. AOI = 45°. Laser damage threshold: 6 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Ø12.7	Ø25.4 × 6 mm		Ø50.8 × 8 mm	
			Catalogue nr.		Price, EUR	Catalogue nr.	Price, EUR	Catalogue nr.	Price, EUR
244 – 248	KrF	99.0	041-0240	041-0240T6	71	042-0240	99	045-0240	216
262 – 266	Nd:YAG	99.0	041-0260	041-0260T6	71	042-0260	99	045-0260	207
257 – 275	Ti:Sa 3H	99.0	041-0266	041-0266T6	71	042-0266	99	045-0266	207
308	XeCl	99.2	041-0300	041-0300T6	69	042-0300	97	045-0300	207
325	HeCd	99.5	041-0325	041-0325T6	67	042-0325	95	045-0325	181
333 – 353	Yb:KGW/KYW 3H	99.5	041-0343	041-0343T6	77	042-0343	107	045-0343	187
347	Ruby	99.5	041-0347	041-0347T6	67	042-0347	95	045-0347	181
351 – 361	Nd:YAG 3H	99.5	041-0350	041-0350T6	67	042-0350	95	045-0350	187
		99.9	-	041-0350T6HHR	110	042-0350HHR	130	045-0350T12HHR*	460
380 – 420	Ti:Sa 2H	99.5	041-0400	041-0400T6	67	042-0400	95	045-0400	181
500 – 530	Yb:KGW/KYW 2H	99.5	041-0515	041-0515T6	62	042-0515	90	045-0515	169
527 – 532	Nd:YAG 2H	99.5	041-0530	041-0530T6	62	042-0530	90	045-0530	169
		99.9	-	041-0530T6HHR	75	042-0530HHR	105	045-0530T12HHR*	410
760 – 840	Ti:Sa 1H	99.5	041-0800	041-0800T6	75	042-0800	97	045-0800	181
		99.9	-	041-0800T6HHR	108	042-0800HHR	130	045-0800T12HHR*	440
1000 – 1060	Yb:KGW/KYW 1H	99.5	041-1030	041-1030T6	62	042-1030	90	045-1030	169
		99.9	-	041-1030T6HHR	75	042-1030HHR	105	045-1030T12HHR*	410
1047 – 1064	Nd:YAG 1H	99.5	041-1060	041-1060T6	62	042-1060	90	045-1060	169
		99.9	-	041-1060T6HHR	75	042-1060HHR	105	045-1060T12HHR*	410

* Thickness of Ø50.8 HHR mirrors is 12.0 mm.

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. Reflectivity R (s+p)/2 for AOI=0° is 99.8%.

The examples:
042-0240-i0, 047-0266-i0.

Substrate material: UV grade Fused Silica Ø76.2x12.7 mm.

AOI = 45°. Laser damage threshold: 6 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Catalogue number	Price, EUR
257 – 275	Ti:Sa 3H	99.0	047-0266	315
333 – 353	Yb:KGW/KYW 3H	99.5	047-0343	315
351 – 361	Nd:YAG 3H	99.5	047-0350	315
380 – 420	Ti:Sa 2H	99.5	047-0400	315
500 – 530	Yb:KGW/KYW 2H	99.5	047-0515	315
527 – 532	Nd:YAG 2H	99.5	047-0530	315
760 – 840	Ti:Sa 1H	99.5	047-0800	315
1000 – 1060	Yb:KGW/KYW 1H	99.5	047-1030	315
1047 – 1064	Nd:YAG 1H	99.5	047-1060	315

DUAL BAND MIRRORS

Substrate: BK7, grade A. AOI = 45°. Laser damage threshold: 1 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Ø12.7	Ø25.4 × 6 mm		Ø50.8 × 8 mm		Ø76.2 × 12.7 mm	
			Catalogue number		Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
390 – 410 + 780 – 820	Ti:Sa 2H+1H	99.5	051-4080	051-4080T6	85	052-4080	103	055-4080	151	057-4080	227
500 – 530 + 1000 – 1060	Yb:KGW/KYW 2H+1H	99.5	051-5103	051-5103T6	85	052-5103	103	055-5103	151	057-5103	227
532 + 1064	Nd:YAG 2H+1H	99.5	051-5306	051-5306T6	85	052-5306	103	055-5306	151	057-5306	227
633 + 1064	HeNe:Nd:YAG 1H	99.5	051-6306	051-6306T6	85	052-6306	103	055-6306	151	057-6306	227

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. The price remains the same as for AOI=45°. An example: 042-4080-i0.

Substrate material: UV grade Fused Silica. AOI = 45°. Laser damage threshold: 2 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Ø12.7	Ø25.4 × 6 mm		Ø50.8 × 8 mm		Ø76.2 × 12.7 mm	
			Catalogue number		Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
266 + 355	Nd:YAG 4H+3H	99.0	061-2635	061-2635T6	125	062-2635	149	065-2635	230	067-2635	365
266 + 532	Nd:YAG 4H+2H	99.0	061-2653	061-2653T6	125	062-2653	149	065-2653	230	067-2653	365
355 + 532	Nd:YAG 3H+2H	99.5	061-3553	061-3553T6	115	062-3553	139	065-3553	215	067-3553	323
355 + 1064	Nd:YAG 3H+1H	99.0	061-3506	061-3506T6	115	062-3506	139	065-3506	215	067-3506	323
390-410 + 780-820	Ti:Sa 2H+1H	99.5	061-4080	061-4080T6	110	062-4080	128	065-4080	214	067-4080	321
500-530 + 1000-1060	Yb:KGW/KYW 2H+1H	99.5	061-5103	061-5103T6	110	062-5103	128	065-5103	214	067-5103	321
532 + 1064	Nd:YAG 2H+1H	99.5	061-5306	061-5306T6	109	062-5306	134	065-5306	209	067-5306	318
		99.9	-	-	-	062-5306HHR	180	-	-	-	-
633 + 1064	HeNe:Nd:YAG 1H	99.5	061-6306	061-6306T6	109	062-6306	134	065-6306	209	067-6306	318

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. The price remains the same as for AOI=45°. An example: 062-3553-i0.

OPTICAL COMPONENTS

NONLINEAR & LASER CRYSTALS

ND:YAG LASERLINE COMPONENTS

FEMTOLINE COMPONENTS

OPTICAL SYSTEMS

OPTO-MECHANICAL COMPONENTS

BROADBAND LASER MIRRORS

Substrate: BK7, grade A. AOI = 45°. Laser damage threshold: 1 J/cm², 8 nsec pulse, 1064 nm typical.

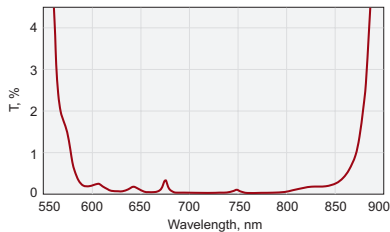
Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Ø12.7	Ø25.4 × 6 mm		Ø50.8 × 8 mm	
			Catalogue number	Price, EUR	Catalogue nr.	Price, EUR	Catalogue nr.	Price, EUR	
360 – 440	Ti:Sa 2H	99	071-3644	071-3644T6	89	072-3644	107	075-3644	151
420 – 540	Dye	99	071-4254	071-4254T6	85	072-4254	103	075-4254	145
520 – 650	Dye	99	071-5265	071-5265T6	85	072-5265	103	075-5265	145
600 – 850	Diode	99	071-6085	071-6085T6	85	072-6085	103	075-6085	145
730 – 950	Ti:Sa	99	071-7395	071-7395T6	86	072-7395	104	075-7395	147
800 – 1100	Diode, YAG	99	071-8011	071-8011T6	86	072-8011	104	075-8011	147

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. The price remains the same as for AOI=45°. An example: 072-3644-i0.

Substrate: UV grade Fused Silica. AOI = 45°. Laser damage threshold: 1 J/cm², 8 nsec pulse, 1064 nm typical.

Wavelength, nm	Application	R, % (s+p)/2	Ø12.7 × 3 mm	Ø12.7 × 6 mm	Ø12.7	Ø25.4 × 6 mm		Ø50.8 × 8 mm	
			Catalogue number	Price, EUR	Catalogue nr.	Price, EUR	Catalogue nr.	Price, EUR	
220 – 250	Spectroscopy	99	081-2225	081-2225T6	145	082-2225	165	085-2225	264
260 – 380	Spectroscopy	99	081-2638	081-2638T6	135	082-2638	155	085-2638	249
360 – 440	Ti:Sa 2H	99	081-3644	081-3644T6	115	082-3644	139	085-3644	215
420 – 540	Dye	99	081-4254	081-4254T6	110	082-4254	128	085-4254	214
520 – 650	Dye	99	081-5265	081-5265T6	110	082-5265	128	085-5265	214
600 – 850	Diode	99	081-6085	081-6085T6	110	082-6085	128	085-6085	214
730 – 950	Ti:Sa	99	081-7395	081-7395T6	130	082-7395	148	085-7395	234
800 – 1100	Diode, YAG	99	081-8011	081-8011T6	120	082-8011	138	085-8011	224

Mirrors provided are of AOI=45°. Mirrors with AOI=0° can be ordered by adding -i0 to catalogue number. The price remains the same as for AOI=45°. An example: 082-2225-i0.



071-6085. HR > 99% @ 600-850 nm

RELATED PRODUCTS

Broadband Low GDD
Ultrafast Laser Mirrors
See page 4.5

Kinematic
Mirror/Beamsplitter
Mounts 840-0056

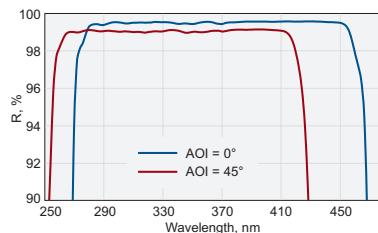


UV FS BROADBAND AND LASER LINE MIRRORS FOR AOI FROM 0 TO 45°

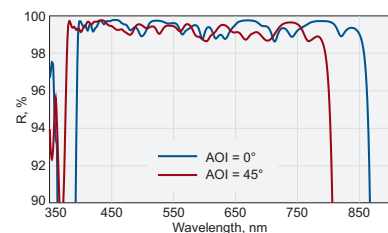
FEATURES

- › R_{avg} > 99% for (s+p)/2 polarization that operates at all angles of incidence from 0 to 45°

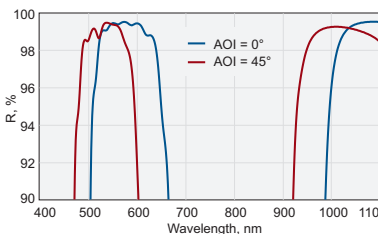
EKSMA OPTICS introduces broadband and laser line dielectric mirrors with high reflectance (greater than 99% over specified range minimum) that operate at all angles of incidence from 0° to 45°. Broadband and laser line mirrors are available for 280-400 nm, 349-355 nm, 400-750 nm, 524-532 nm, 532+1064 nm, 750-1100 nm, 1047-1064 nm wavelength ranges.



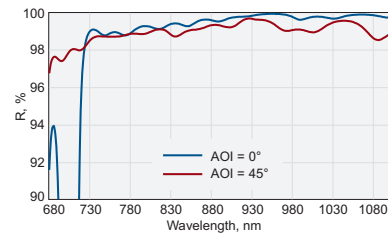
081-2840-i0-45.
HR > 99% @ 280-400 nm, AOI from 0 to 45°



081-4075-i0-45.
HR > 99% @ 400-750 nm, AOI from 0 to 45°



062-5306HHR-i0-45.
HR > 99.7% @ 532+1064 nm, AOI from 0 to 45°



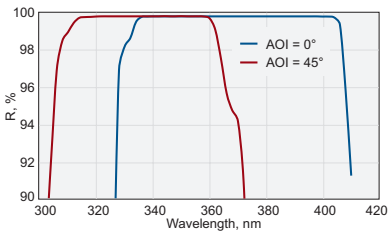
081-7511-i0-45.
HR > 99% @ 750-1100 nm, AOI from 0 to 45°

Substrate: UV grade Fused Silica

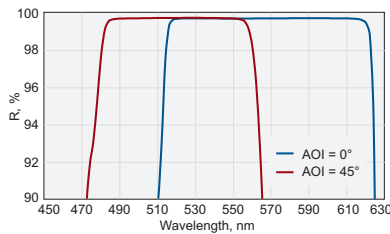
Wavelength, nm	AOI, deg	R, % (s+p)/2	LDT, J/cm ² 10 ns, 10 Hz	Ø12.7 × 6 mm		Ø25.4 × 6 mm		Ø50.8 × 6 mm	
				Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
257	0-45	99.0	0.5	041-0257-i0-45	130	042-0257-i0-45	165	-	-
280 – 400	0-45	99.0	0.5	086-2840-i0-45	77	082-2840-i0-45	98	-	-
343 – 355	0-45	99.5	1	041-0350-i0-45	99	042-0350-i0-45	121	-	-
400 – 750	0-45	99.0	1	086-4075-i0-45	42	082-4075-i0-45	65	085-4075-i0-45	124
524 – 532	0-45	99.9	10	041-0530HHR-i0-45	90	042-0530HHR-i0-45	120	-	-
532 + 1064	0-45	99.7	3	061-5306HHR-i0-45	95	062-5306HHR-i0-45	125	-	-
750 – 1100	0-45	99.0	1	086-7511-i0-45	42	082-7511-i0-45	65	085-7511-i0-45	124
760 – 840 Low GDD	0-45	99.9	3	041-7684HHR-i0-45	110	042-17684HHR-i0-45	140	-	-
1047 – 1064	0-45	99.7	20	041-1060HHR-i0-45	90	042-1060HHR-i0-45	120	-	-

Substrate: BK7

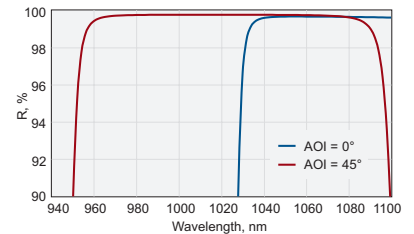
Wavelength, nm	AOI, deg	R, % (s+p)/2	LDT, J/cm ² 10 ns, 10 Hz	Ø12.7 × 6 mm		Ø25.4 × 6 mm		Ø50.8 × 6 mm	
				Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
400 – 750	0-45	99.0	1	076-4076-i0-45	38	072-4075-i0-45	59	075-4075-i0-45	112
750 – 1100	0-45	99.0	1	076-7511-i0-45	38	072-7511-i0-45	59	075-7511-i0-45	112



042-0350-i0-45.
HR > 99.5% @ 343-355 nm, AOI from 0 to 45°



042-0530HHR-i0-45.
HR > 99.9% @ 524-532 nm, AOI from 0 to 45°



042-1060HHR-i0-45.
HR > 99.7% @ 1047-1064 nm, AOI from 0 to 45°

HOUSING ACCESSORIES

Kinematic Mirror Mount 840-0010



Adapter for Mirror at 45° 840-0115



HIGH POWER IBS COATED LASER MIRRORS

SUBSTRATE

Material	UV grade fused silica
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	Ion Beam Sputtering (IBS)
Adhesion and Durability	Per MIL-C-675A, Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Coated Surface Flatness	$\lambda/10$ at 633 nm over clear aperture

FOR NANOSECOND APPLICATIONS

Design wavelength – 532 nm. LIDT >10 J/cm², 10 ns pulse, 100 Hz, 532 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
532	45	99.9	041-0530T6HHR	75	042-0530HHR	105	045-0530T12HHR	410
532	0	99.9	041-0530T6HHR-i0	75	042-0530HHR-i0	105	045-0530T12HHR-i0	410
532	0-45	99.9	041-0530T6HHR-i0-45	90	042-0530HHR-i0-45	120	045-0530T12HHR-i0-45	470

Design wavelength – 532 nm. LIDT >20 J/cm², 10 ns pulse, 100 Hz, 532 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
532	45	99.9	041-0530T6UHHR	110	042-0530UHHR	155	045-0530T12UHHR	530
532	0	99.9	041-0530T6UHHR-i0	110	042-0530UHHR-i0	155	045-0530T12UHHR-i0	530

Design wavelength – 800 nm. LIDT >30 J/cm², 10 ns pulse, 100 Hz, 800 nm typical.

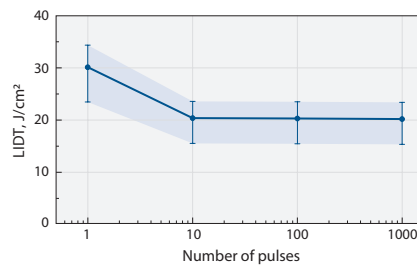
Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
800	45	99.9	041-0800T6UHHR	115	042-0800UHHR	165	045-0800T12UHHR	550
800	0	99.9	041-0800T6UHHR-i0	115	042-0800UHHR-i0	165	045-0530T12UHHR-i0	550

Design wavelength – 1064 nm. LIDT >20 J/cm², 10 ns pulse, 100 Hz, 1064 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	45	99.9	041-1060T6HHR	75	042-1060HHR	105	045-1060T12HHR	410
1064	0	99.9	041-1060T6HHR-i0	75	042-1060HHR-i0	105	045-1060T12HHR-i0	410
1064	0-45	99.9	041-1060T6HHR-i0-45	90	042-1060HHR-i0-45	120	045-1060T12HHR-i0-45	470

Design wavelength – 1064 nm. LIDT >40 J/cm², 10 ns pulse, 100 Hz, 1064 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	45	99.9	041-1060T6UHHR	115	042-1060UHHR	165	045-1060T12UHHR	550
1064	0	99.9	041-1060T6UHHR-i0	115	042-1060UHHR-i0	165	045-1060T12UHHR-i0	550



TEST CONDITIONS:

Wavelength	532 nm
Pulse duration	(5.4 ± 0.3) ns
Repetition rate	100 Hz
AOI	45°
Polarization	linear P
Beam diameter (1/e ²)	(206.0 ± 6.7) μm

FOR PICOSECOND APPLICATIONS

OPTICAL
COMPONENTS

Design wavelength – 515 nm. LIDT >1 J/cm², 10 ps pulse, 20 kHz, 515 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
515	45	99.9	041-0515PHR	75	042-0515PHR	105	045-0515PHR	410
515	0	99.9	041-0515PHR-i0	75	042-0515PHR-i0	105	045-0515PHR-i0	410
515	0-45	99.9	041-0515PHR-i0-45	90	042-0515PHR-i0-45	120	045-0515PHR-i0-45	470

Design wavelength – 515 nm. LIDT >2.5 J/cm², 10 ps pulse, 20 kHz, 515 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
515	45	99.9	041-0515PUHR	110	042-0515PUHR	105	045-0515PUHR	530
515	0	99.9	041-0515PUHR-i0	110	042-0515PUHR-i0	105	045-0515PUHR-i0	530

NONLINEAR & LASER
CRYSTALS

Design wavelength – 1030 nm. LIDT >1.5 J/cm², 10 ps pulse, 20 kHz, 1030 nm typical.

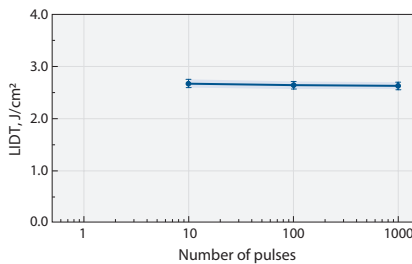
Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1030	45	99.9	041-1030PHR	75	042-1030PHR	105	045-1030PHR	410
1030	0	99.9	041-1030PHR-i0	75	042-1030PHR-i0	105	045-1030PHR-i0	410
1030	0-45	99.9	041-1030PHR-i0-45	90	042-1030PHR-i0-45	120	045-1030PHR-i0-45	470

ND:YAG LASERLINE
COMPONENTS

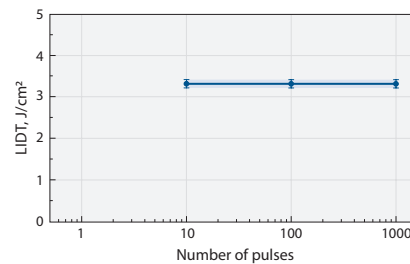
Design wavelength – 1030 nm. LIDT >3 J/cm², 10 ps pulse, 20 kHz, 515 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1030	45	99.9	041-1030PUHR	115	042-1030PUHR	165	045-1030PUHR	550
1030	0	99.9	041-1030PUHR-i0	115	042-1030PUHR-i0	165	045-1030PUHR-i0	550

FEMTOLINE
COMPONENTS



LIDT of High Power Laser Mirrors @ 515 nm



LIDT of High Power Laser Mirrors @ 1030 nm

OPTICAL
SYSTEMS

OPTO-MECHANICAL
COMPONENTS

FOR FEMTOSECOND APPLICATIONS

Design wavelength – 500-530 nm. LIDT >0.15 J/cm², 50 fs pulse, 100 Hz, 515 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
500 – 530	45	99.9	041-0515T6HHR	75	042-0515T6HHR	105	045-0515T12HHR	410
500 – 530	0	99.9	041-0515T6HHR-i0	75	042-0515T6HHR-i0	105	045-0515T12HHR-i0	410

Design wavelength – 760-840 nm. LIDT >0.15 J/cm², 50 fs pulse, 100 Hz, 800 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
760 – 840	45	99.9	041-0800T6HHR	108	042-0800HHR	130	045-0800T12HHR	440
760 – 840	0	99.9	041-0800T6HHR-i0	108	042-0800HHR-i0	130	045-0800T12HHR-i0	440
760 – 840	0-45	99.9	041-7684T6HHR-i0-45	110	042-7684HHR-i0-45	140	045-4684T12HHR-i0-45	480

Design wavelength – 760-840 nm. LIDT >0.4 J/cm², 50 fs pulse, 100 Hz, 800 nm typical.

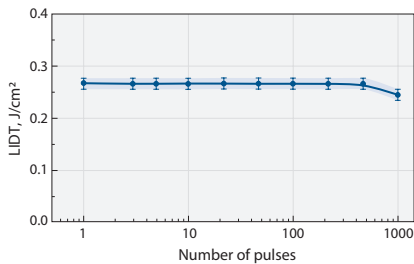
Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
760 – 840	45	99.9	041-0800T6UHHR	158	042-0800T6UHHR	190	045-0800T12UHHR	570
760 – 840	0	99.9	041-0800T6UHHR-i0	158	042-0800T6UHHR-i0	190	045-0800T12UHHR-i0	570

Design wavelength – 720-880 nm. LIDT >0.25 J/cm², 50 fs pulse, 100 Hz, 800 nm typical.

Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm		Ø 76.2 x 15 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
720 – 880	45	99.9	081-7288HHR	108	082-7288HHR	145	085-7288HHR	490	087-7288T15HHR	515
720 – 880	0	99.9	081-7288HHR-i0	108	082-7288HHR-i0	145	085-7288HHR-i0	490	087-7288T15HHR-i0	515

Design wavelength – 1000-1060 nm. LIDT >0.3 J/cm², 50 fs pulse, 100 Hz, 1030 nm typical.

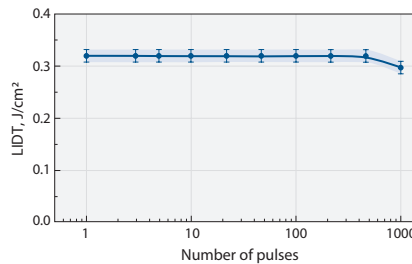
Wavelength, nm	AOI, deg	R, % (s+p)/2	Ø 12.7 x 6 mm		Ø 25.4 x 6 mm		Ø 50.8 x 12 mm	
			Catalogue number	Price, EUR	Catalogue number	Price, EUR	Catalogue number	Price, EUR
1000 – 1060	45	99.9	041-1030T6HHR	75	042-1030HHR	105	045-1030HHR	410
1000 – 1060	0	99.9	041-1030T6HHR-i0	75	042-1030HHR-i0	105	045-1030HHR-i0	410



LIDT of High Power Laser Mirrors @ 720-880 nm, AOI = 45°

TEST CONDITIONS:

Wavelength	800 nm
Pulse duration	52.4 fs
Repetition rate	50 Hz
AOI	45°
Polarization	linear P
Beam diameter (1/e ²)	(95.5 ± 0.9) µm



LIDT of High Power Laser Mirrors @ 720-880 nm, AOI = 0°

TEST CONDITIONS:

Wavelength	800 nm
Pulse duration	52.4 fs
Repetition rate	50 Hz
AOI	0°
Polarization	linear
Beam diameter (1/e ²)	(95.5 ± 0.9) µm

DICHROIC MIRRORS

FEATURES

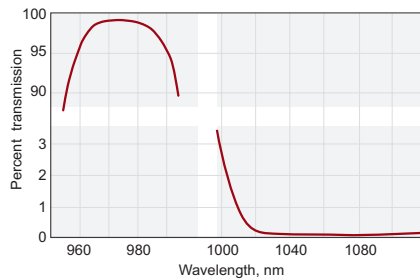
- › Laser Damage Threshold:
 - > 2 J/cm², 8 ns pulse, 1064 nm typical for BK7 substrates
 - > 5 J/cm², 8 ns pulse, 1064 nm typical for UV FS substrates
- › Back side antireflection coated: R < 0.5%
- › Parallelism: 30 arcsec

SUBSTRATE

Material	UV grade fused silica or BK7 glass
S1 Surface Flatness	λ/10 typical at 633 nm
S1 Surface Quality	20 – 10 scratch & dig (MIL-PRF-13830B)
S2 Surface Flatness	λ/10 typical at 633 nm
S2 Surface Quality	20 – 10 scratch & dig (MIL-PRF-13830B)
Diameter Tolerance	+0.00 mm / -0.12 mm
Thickness Tolerance	±0.25 mm
Parallelism	30 arcsec
Chamfer	0.3 mm at 45° typical

DICHROIC MIRRORS WITH HIGH TRANSMISSION

042-6200HT.
 HR > 99.5%
 @ 1028 – 1080 nm,
 HT > 98%
 @ 965 – 982 nm,
 AOI = 0°



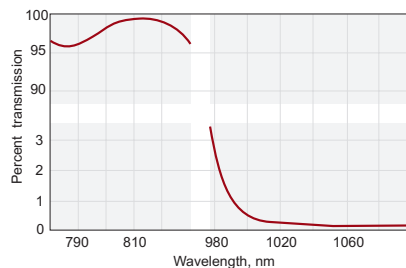
COATING

Technology	Ion Beam Sputtering (IBS)
Laser Damage Threshold	>10 J/cm ² , 8 nsec pulse, 1064 nm typical
Back side antireflection coated	R < 0.1% at AOI = 0° R < 0.25% at AOI = 45°

Reflected wavelength, nm, R > 99.5%	Transmitted wavelength, nm	Transmission, %	AOI	Substrate material	Ø12.7x3 mm		Ø25.4x6 mm	
					Catalogue number	Price, EUR	Catalogue number	Price, EUR
1064	808	>99	0	UV FS	041-6800HT	175	042-6800HT	220
1064	808	>99	45	UV FS	041-6805HT	190	042-6805HT	235
1028 – 1080	965 – 982	>98	0	UV FS	041-6200HT	220	042-6200HT	260
1028 – 1080	965 – 982	>98	45	UV FS	041-6205HT	250	042-6205HT	290
1028 – 1080	965 – 982	>98	22.5	UV FS	041-6202HT	220	042-6202HT	260

STANDARD DICHROIC MIRRORS

031-6800.
 HR > 99.5% @ 1064 nm,
 HT > 95% @ 808 nm,
 AOI = 0°



COATING

Technology	Electron beam multilayer dielectric
Adhesion and Durability	Per MIL-C-675A. Insoluble in lab solvents
Clear Aperture	Exceeds central 85% of diameter
Laser Damage Threshold:	
BK7	2 J/cm ² , 8 ns pulse, 1064 nm typical
UV FS	5 J/cm ² , 8 ns pulse, 1064 nm typical
Coated Surface Flatness	λ/10 at 633 nm over 85% of diameter available

Reflected wavelength, nm, R > 99.5%	Transmitted wavelength, nm	Transmission, %	AOI	Substrate material	Ø12.7x3 mm		Ø25.4x6 mm	
					Catalogue number	Price, EUR	Catalogue number	Price, EUR
633	1064	>90	45	BK7	041-6105	90	042-6105	115
1064	633	>90	45	BK7	041-6605	95	042-6605	120
1064	808	>95	0	BK7	031-6800	95	032-6800	120
1064	808	>95	45	BK7	031-6805	95	032-6805	120
1064	808	>95	0	UV FS	041-6800	120	042-6800	150
1064	808	>95	45	UV FS	041-6805	120	042-6805	150

METAL COATED MIRRORS

EKSMA OPTICS offers various size round, rectangular, spherical mirrors protected gold, silver or aluminium.

Metallic mirrors are widely used due to a moderate level of reflection over a very broad spectral range. Protected gold coatings have the highest reflectance in IR, silver is most efficient in VIS, while aluminium is economical reflector over entire 300-IR region.

A layer of dielectric material protects the coatings of the mirrors in order to make them durable. Enhanced metallic coatings provide greater reflection across the operating bandwidth.

As metallic coatings modify the state of polarization of an incident beam, they are inappropriate for polarization sensitive applications.

Type	Average reflection, %	Wavelength, nm	Laser Induced Damage Threshold at 1064 nm, 50 Hz, 11 nsec, J/cm ²
Protected aluminium	>86	300-IR	0.25
Protected silver	>96	400-IR	1.8
Protected gold	>98	900-IR	1.0

* Laser Induced Damage Threshold results are measured according to ISO 21254-2: 1000-on-1 test procedure.

SPECIFICATIONS for Flat Substrates

Material	BK7, UV FS
S1 Surface Flatness	$\lambda/10$ @ 633 nm
S1 Surface Quality	40 – 20 scratch & dig (MIL-PRF-13830B)
S2 Surface Quality	Commercial polish
Clear Aperture	>90% of the diameter

SPECIFICATIONS for Spherical Substrates

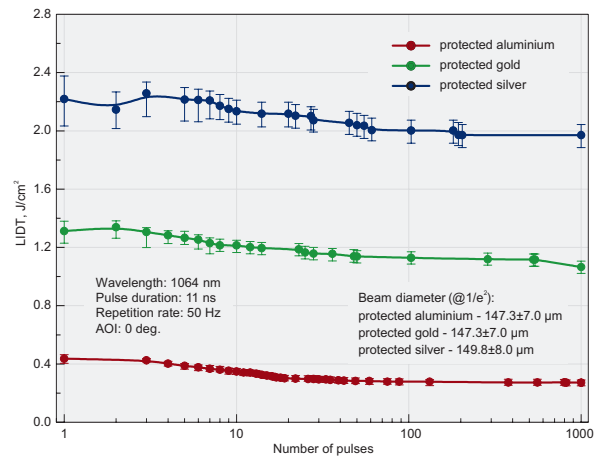
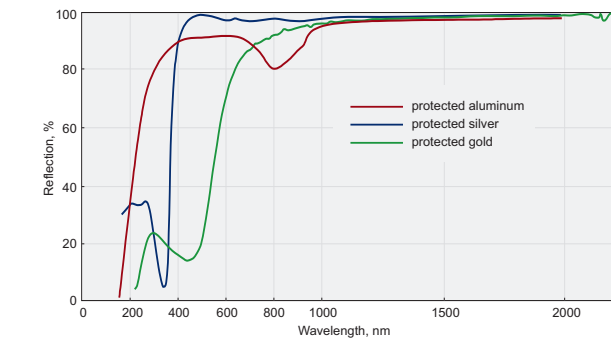
Material	BK7, UV FS
S1 (curved) Surface Flatness	$\lambda/10$ @ 633 nm
S1 (curved) Surface Quality	40 – 20 scratch & dig (MIL-PRF-13830B)
S2 (plane) Surface Quality	Commercial polish
Clear Aperture	>90% of the diameter
Diameter Tolerance	0.00 / -0.13 mm
Thickness Tolerance	± 0.2 mm

PROTECTED ALUMINIUM MIRRORS

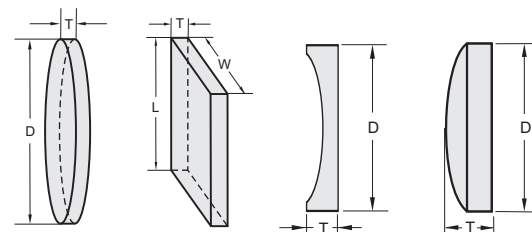
FEATURES

- › LIDT – 0.25 J/cm² at 1064 nm, 50 Hz, 11 nsec pulses*
- › LIDT – 0.1 J/cm² at 355 nm, 50 Hz, 5.7 nsec pulses*
- › Average Reflection >86% for 300 nm – IR
- › BK7, UVFS, Zerodur® substrates available
- › Round, Square and Flat or Spherical Mirrors available
- › OEM capabilities - please contact for special pricing

* Laser Induced Damage Threshold results are measured according to ISO 21254-2: 1000-on-1 test procedure.



Comparison of Protected Ag, Al and Au Mirrors @ 1064 nm, 50 Hz, 11 nsec



Drawings of flat round, flat rectangular and spherical mirrors

Protected Aluminium (Al) Mirrors serve as an economical reflector over entire 300-IR region. Enhanced metallic coatings provide greater reflection across the operating bandwidth.

OPTICAL COMPONENTS

FLAT RECTANGULAR MIRRORS. Substrate type: plano-plano

Width W, mm	Length L, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
15.0	20.0	6.0	BK7	091-0315	22
20.0	30.0	6.0	BK7	092-0315	29
25.4	25.4	6.0	BK7	093-0315	27
25.4	50.8	10.0	BK7	094-0315	60
50.8	50.8	10.0	BK7	095-0315	90
15.0	20.0	6.0	UV FS	091-3315	36
20.0	30.0	6.0	UV FS	092-3315	47
25.4	25.4	6.0	UV FS	093-3315	45
25.4	50.8	10.0	UV FS	094-3315	95
50.8	50.8	10.0	UV FS	095-3315	135

SPHERICAL MIRRORS. Diameter, D = 12.7 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	091-0115R-50	35
-75	Plano-concave	BK7	091-0115R-75	35
-100	Plano-concave	BK7	091-0115R-100	35
-150	Plano-concave	BK7	091-0115R-150	35
-200	Plano-concave	BK7	091-0115R-200	35
-250	Plano-concave	BK7	091-0115R-250	35
-300	Plano-concave	BK7	091-0115R-300	35
-400	Plano-concave	BK7	091-0115R-400	35
-500	Plano-concave	BK7	091-0115R-500	35
-1000	Plano-concave	BK7	091-0115R-1000	35
-1500	Plano-concave	BK7	091-0115R-1500	35
-2000	Plano-concave	BK7	091-0115R-2000	35
-50	Plano-concave	UV FS	091-3115R-50	45
-75	Plano-concave	UV FS	091-3115R-75	45
-100	Plano-concave	UV FS	091-3115R-100	45
-150	Plano-concave	UV FS	091-3115R-150	45
-200	Plano-concave	UV FS	091-3115R-200	45
-250	Plano-concave	UV FS	091-3115R-250	45
-300	Plano-concave	UV FS	091-3115R-300	45
-400	Plano-concave	UV FS	091-3115R-400	45

SPHERICAL MIRRORS. Diameter, D = 25.4 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	092-0115R-50	55
-75	Plano-concave	BK7	092-0115R-75	55
-100	Plano-concave	BK7	092-0115R-100	55
-150	Plano-concave	BK7	092-0115R-150	55
-200	Plano-concave	BK7	092-0115R-200	55
-250	Plano-concave	BK7	092-0115R-250	55
-300	Plano-concave	BK7	092-0115R-300	55
-400	Plano-concave	BK7	092-0115R-400	55
-500	Plano-concave	BK7	092-0115R-500	55
-600	Plano-concave	BK7	092-0115R-600	55
-750	Plano-concave	BK7	092-0115R-750	55
-800	Plano-concave	BK7	092-0115R-800	55
-1000	Plano-concave	BK7	092-0115R-1000	55
-1500	Plano-concave	BK7	092-0115R-1500	55
-2000	Plano-concave	BK7	092-0115R-2000	55
-2500	Plano-concave	BK7	092-0115R-2500	55
-3000	Plano-concave	BK7	092-0115R-3000	55
-4000	Plano-concave	BK7	092-0115R-4000	55
-5000	Plano-concave	BK7	092-0115R-5000	55
-6000	Plano-concave	BK7	092-0115R-6000	55
-8000	Plano-concave	BK7	092-0115R-8000	55

FLAT ROUND MIRRORS. Substrate type: plano-plano

Diameter D, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
12.7	3.0	BK7	091-0015	20
12.7	6.0	BK7	091-0015T6	20
25.4	6.0	BK7	092-0015	25
50.8	8.0	BK7	095-0015	80
76.2	12.7	BK7	097-0015	160
101.6	15.0	BK7	098-0015	260
12.7	3.0	UV FS	091-3015	30
12.7	6.0	UV FS	091-3015T6	30
25.4	6.0	UV FS	092-3015	35
50.8	8.0	UV FS	095-3015	120
76.2	12.7	UV FS	097-3015	195
101.6	15.0	UV FS	098-3015	340

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-500	Plano-concave	UV FS	091-3115R-500	45
-1000	Plano-concave	UV FS	091-3115R-1000	45
-1500	Plano-concave	UV FS	091-3115R-1500	45
-2000	Plano-concave	UV FS	091-3115R-2000	45
+50	Plano-convex	BK7	091-0215R+50	37
+75	Plano-convex	BK7	091-0215R+75	37
+100	Plano-convex	BK7	091-0215R+100	37
+150	Plano-convex	BK7	091-0215R+150	37
+200	Plano-convex	BK7	091-0215R+200	37
+300	Plano-convex	BK7	091-0215R+300	37
+400	Plano-convex	BK7	091-0215R+400	37
+500	Plano-convex	BK7	091-0215R+500	37
+50	Plano-convex	UV FS	091-3215R+50	48
+75	Plano-convex	UV FS	091-3215R+75	48
+100	Plano-convex	UV FS	091-3215R+100	48
+150	Plano-convex	UV FS	091-3215R+150	48
+200	Plano-convex	UV FS	091-3215R+200	48
+300	Plano-convex	UV FS	091-3215R+300	48
+400	Plano-convex	UV FS	091-3215R+400	48
+500	Plano-convex	UV FS	091-3215R+500	48

NONLINEAR & LASER CRYSTALS

ND:YAG LASERLINE COMPONENTS

FEMTOLINE COMPONENTS

OPTICAL SYSTEMS

OPTO-MECHANICAL COMPONENTS

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+50	Plano-convex	BK7	092-0215R+50	59
+75	Plano-convex	BK7	092-0215R+75	59
+100	Plano-convex	BK7	092-0215R+100	59
+150	Plano-convex	BK7	092-0215R+150	59
+200	Plano-convex	BK7	092-0215R+200	59
+300	Plano-convex	BK7	092-0215R+300	59
+400	Plano-convex	BK7	092-0215R+400	59
+500	Plano-convex	BK7	092-0215R+500	59
+600	Plano-convex	BK7	092-0215R+600	59
+800	Plano-convex	BK7	092-0215R+800	59
+1000	Plano-convex	BK7	092-0215R+1000	59
+1500	Plano-convex	BK7	092-0215R+1500	59
+2000	Plano-convex	BK7	092-0215R+2000	59
+4000	Plano-convex	BK7	092-0215R+4000	59
+5000	Plano-convex	BK7	092-0215R+5000	59

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+50	Plano-convex	UV FS	092-3215R+50	75
+75	Plano-convex	UV FS	092-3215R+75	75
+100	Plano-convex	UV FS	092-3215R+100	75
+150	Plano-convex	UV FS	092-3215R+150	75
+200	Plano-convex	UV FS	092-3215R+200	75
+300	Plano-convex	UV FS	092-3215R+300	75
+400	Plano-convex	UV FS	092-3215R+400	75
+500	Plano-convex	UV FS	092-3215R+500	75
+600	Plano-convex	UV FS	092-3215R+600	75
+800	Plano-convex	UV FS	092-3215R+800	75
+1000	Plano-convex	UV FS	092-3215R+1000	75
+1500	Plano-convex	UV FS	092-3215R+1500	75
+2000	Plano-convex	UV FS	092-3215R+2000	75
+4000	Plano-convex	UV FS	092-3215R+4000	75
+5000	Plano-convex	UV FS	092-3215R+5000	75

SPHERICAL MIRRORS. Diameter, D = 50.8 mm. Thickness (edge for plano-concave, center for plano-convex), T = 10.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-100	Plano-concave	BK7	095-0115R-100	118
-150	Plano-concave	BK7	095-0115R-150	118
-200	Plano-concave	BK7	095-0115R-200	118
-250	Plano-concave	BK7	095-0115R-250	118
-300	Plano-concave	BK7	095-0115R-300	118
-400	Plano-concave	BK7	095-0115R-400	118
-500	Plano-concave	BK7	095-0115R-500	118
-600	Plano-concave	BK7	095-0115R-600	118
-800	Plano-concave	BK7	095-0115R-800	118
-1000	Plano-concave	BK7	095-0115R-1000	118
-1500	Plano-concave	BK7	095-0115R-1500	118
-2000	Plano-concave	BK7	095-0115R-2000	118
-2500	Plano-concave	BK7	095-0115R-2500	118
-3000	Plano-concave	BK7	095-0115R-3000	118
-4000	Plano-concave	BK7	095-0115R-4000	118
-5000	Plano-concave	BK7	095-0115R-5000	118
-6000	Plano-concave	BK7	095-0115R-6000	118
-8000	Plano-concave	BK7	095-0115R-8000	118
-10000	Plano-concave	BK7	095-0115R-10000	118
-100	Plano-concave	UV FS	095-3115R-100	143
-150	Plano-concave	UV FS	095-3115R-150	143
-200	Plano-concave	UV FS	095-3115R-200	143
-250	Plano-concave	UV FS	095-3115R-250	143
-300	Plano-concave	UV FS	095-3115R-300	143
-400	Plano-concave	UV FS	095-3115R-400	143
-500	Plano-concave	UV FS	095-3115R-500	143
-600	Plano-concave	UV FS	095-3115R-600	143
-800	Plano-concave	UV FS	095-3115R-800	143
-1000	Plano-concave	UV FS	095-3115R-1000	143
-1500	Plano-concave	UV FS	095-3115R-1500	143
-2000	Plano-concave	UV FS	095-3115R-2000	143
-2500	Plano-concave	UV FS	095-3115R-2500	143
-3000	Plano-concave	UV FS	095-3115R-3000	143
-4000	Plano-concave	UV FS	095-3115R-4000	143
-5000	Plano-concave	UV FS	095-3115R-5000	143
-6000	Plano-concave	UV FS	095-3115R-6000	143
-8000	Plano-concave	UV FS	095-3115R-8000	143
-10000	Plano-concave	UV FS	095-3115R-10000	143

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+100	Plano-convex	BK7	095-0215R+100	127
+150	Plano-convex	BK7	095-0215R+150	127
+200	Plano-convex	BK7	095-0215R+200	127
+300	Plano-convex	BK7	095-0215R+300	127
+400	Plano-convex	BK7	095-0215R+400	127
+500	Plano-convex	BK7	095-0215R+500	127
+600	Plano-convex	BK7	095-0215R+600	127
+800	Plano-convex	BK7	095-0215R+800	127
+1000	Plano-convex	BK7	095-0215R+1000	127
+1500	Plano-convex	BK7	095-0215R+1500	127
+2000	Plano-convex	BK7	095-0215R+2000	127
+100	Plano-convex	UV FS	095-3215R+100	153
+150	Plano-convex	UV FS	095-3215R+150	153
+200	Plano-convex	UV FS	095-3215R+200	153
+300	Plano-convex	UV FS	095-3215R+300	153
+400	Plano-convex	UV FS	095-3215R+400	153
+500	Plano-convex	UV FS	095-3215R+500	153
+600	Plano-convex	UV FS	095-3215R+600	153
+800	Plano-convex	UV FS	095-3215R+800	153
+1000	Plano-convex	UV FS	095-3215R+1000	153
+1500	Plano-convex	UV FS	095-3215R+1500	153
+2000	Plano-convex	UV FS	095-3215R+2000	153

COATINGS

WINDOWS & FILTERS

MIRRORS

LENSES

PRISMS

POLARIZING OPTICS

UV & IR OPTICS

RELATED PRODUCTS

Curved Windows. [See page 1.8](#)

Kinematic Mirror Mount 840-0010



Adapter for Mirror at 45° 840-0115



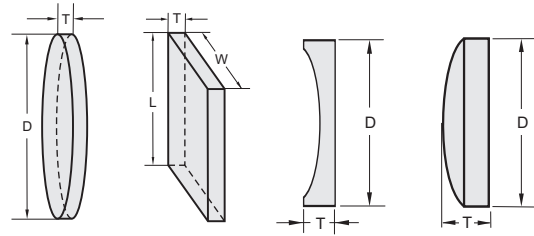
PROTECTED SILVER MIRRORS

FEATURES

- LIDT – 0.25 J/cm² at 800 nm, 50 Hz, 94 fsec pulses*
- LIDT – 1.8 J/cm² at 1064 nm, 50 Hz, 11 nsec pulses*
- Average Reflection >97% for 400 nm – IR
- BK7, UVFS, Zerodur® substrates available
- Round, Square and Flat or Spherical Mirrors available
- OEM capabilities – please contact for special pricing
- Test samples are available on request

* Laser Induced Damage Threshold results are measured according to ISO 21254-2: 1000-on-1 test procedure.

Protected Silver (Ag) Mirrors feature higher reflectance than aluminium throughout the visible and near-infrared spectral region. Our protected silver mirrors has excellent durability.



Drawings of flat round, flat rectangular and spherical mirrors

FLAT RECTANGULAR MIRRORS. Substrate type: plano-plano

Width W, mm	Length L, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
15.0	20.0	6.0	BK7	091-0325	36
20.0	30.0	6.0	BK7	092-0325	48
25.4	25.4	6.0	BK7	093-0325	46
25.4	50.8	10.0	BK7	094-0325	70
50.8	50.8	10.0	BK7	095-0325	100
15.0	20.0	6.0	UV FS	091-3325	50
20.0	30.0	6.0	UV FS	092-3325	66
25.4	25.4	6.0	UV FS	093-3325	64
25.4	50.8	10.0	UV FS	094-3325	105
50.8	50.8	10.0	UV FS	095-3325	145

FLAT ROUND MIRRORS. Substrate type: plano-plano

Diameter D, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
12.7	3.0	BK7	091-0025	26
12.7	6.0	BK7	091-0025T6	26
25.4	6.0	BK7	092-0025	39
50.8	8.0	BK7	095-0025	90
76.2	12.7	BK7	097-0025	180
101.6	15.0	BK7	098-0025	330
12.7	3.0	UV FS	091-3025	36
12.7	6.0	UV FS	091-3025T6	36
25.4	6.0	UV FS	092-3025	44
50.8	8.0	UV FS	095-3025	96
76.2	12.7	UV FS	097-3025	215
101.6	15.0	UV FS	098-3025	410

SPHERICAL MIRRORS. Diameter, D = 12.7 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	091-0125R-50	42
-75	Plano-concave	BK7	091-0125R-75	42
-100	Plano-concave	BK7	091-0125R-100	42
-150	Plano-concave	BK7	091-0125R-150	42
-200	Plano-concave	BK7	091-0125R-200	42
-250	Plano-concave	BK7	091-0125R-250	42
-300	Plano-concave	BK7	091-0125R-300	42
-400	Plano-concave	BK7	091-0125R-400	42
-500	Plano-concave	BK7	091-0125R-500	42
-1000	Plano-concave	BK7	091-0125R-1000	42
-1500	Plano-concave	BK7	091-0125R-1500	42
-2000	Plano-concave	BK7	091-0125R-2000	42
-50	Plano-concave	UV FS	091-3125R-50	52
-75	Plano-concave	UV FS	091-3125R-75	52
-100	Plano-concave	UV FS	091-3125R-100	52
-150	Plano-concave	UV FS	091-3125R-150	52
-200	Plano-concave	UV FS	091-3125R-200	52
-250	Plano-concave	UV FS	091-3125R-250	52
-300	Plano-concave	UV FS	091-3125R-300	52
-400	Plano-concave	UV FS	091-3125R-400	52
-500	Plano-concave	UV FS	091-3125R-500	52
-1000	Plano-concave	UV FS	091-3125R-1000	52
-1500	Plano-concave	UV FS	091-3125R-1500	52
-2000	Plano-concave	UV FS	091-3125R-2000	52

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+50	Plano-convex	BK7	091-0225R+50	44
+100	Plano-convex	BK7	091-0225R+100	44
+150	Plano-convex	BK7	091-0225R+150	44
+200	Plano-convex	BK7	091-0225R+200	44
+300	Plano-convex	BK7	091-0225R+300	44
+400	Plano-convex	BK7	091-0225R+400	44
+500	Plano-convex	BK7	091-0225R+500	44
+50	Plano-convex	UV FS	091-3225R+50	55
+100	Plano-convex	UV FS	091-3225R+100	55
+150	Plano-convex	UV FS	091-3225R+150	55
+200	Plano-convex	UV FS	091-3225R+200	55
+300	Plano-convex	UV FS	091-3225R+300	55
+400	Plano-convex	UV FS	091-3225R+400	55
+500	Plano-convex	UV FS	091-3225R+500	55

OPTICAL COMPONENTS

NONLINEAR & LASER CRYSTALS

ND:YAG LASERLINE COMPONENTS

FEMTOLINE COMPONENTS

OPTICAL SYSTEMS

OPTO-MECHANICAL COMPONENTS

SPHERICAL MIRRORS. Diameter, D = 25.4 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	092-0125R-50	65
-75	Plano-concave	BK7	092-0125R-75	65
-100	Plano-concave	BK7	092-0125R-100	65
-150	Plano-concave	BK7	092-0125R-150	65
-200	Plano-concave	BK7	092-0125R-200	65
-250	Plano-concave	BK7	092-0125R-250	65
-300	Plano-concave	BK7	092-0125R-300	65
-400	Plano-concave	BK7	092-0125R-400	65
-500	Plano-concave	BK7	092-0125R-500	65
-600	Plano-concave	BK7	092-0125R-600	65
-750	Plano-concave	BK7	092-0125R-750	65
-800	Plano-concave	BK7	092-0125R-800	65
-1000	Plano-concave	BK7	092-0125R-1000	65
-1500	Plano-concave	BK7	092-0125R-1500	65
-2000	Plano-concave	BK7	092-0125R-2000	65
-2500	Plano-concave	BK7	092-0125R-2500	65
-3000	Plano-concave	BK7	092-0125R-3000	65
-4000	Plano-concave	BK7	092-0125R-4000	65
-5000	Plano-concave	BK7	092-0125R-5000	65
-6000	Plano-concave	BK7	092-0125R-6000	65
-8000	Plano-concave	BK7	092-0125R-8000	65
-50	Plano-concave	UV FS	092-3125R-50	80
-75	Plano-concave	UV FS	092-3125R-75	80
-100	Plano-concave	UV FS	092-3125R-100	80
-150	Plano-concave	UV FS	092-3125R-150	80
-200	Plano-concave	UV FS	092-3125R-200	80
-250	Plano-concave	UV FS	092-3125R-250	80
-300	Plano-concave	UV FS	092-0125R-300	80
-400	Plano-concave	UV FS	092-0125R-400	80
-500	Plano-concave	UV FS	092-3125R-500	80
-600	Plano-concave	UV FS	092-3125R-600	80
-750	Plano-concave	UV FS	092-3125R-750	80
-800	Plano-concave	UV FS	092-3125R-800	80
-1000	Plano-concave	UV FS	092-3125R-1000	80
-1500	Plano-concave	UV FS	092-3125R-1500	80

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-2000	Plano-concave	UV FS	092-3125R-2000	80
-2500	Plano-concave	UV FS	092-3125R-2500	80
-3000	Plano-concave	UV FS	092-0125R-3000	80
-4000	Plano-concave	UV FS	092-3125R-4000	80
-5000	Plano-concave	UV FS	092-3125R-5000	80
-6000	Plano-concave	UV FS	092-0125R-6000	80
-8000	Plano-concave	UV FS	092-0125R-8000	80
+50	Plano-convex	BK7	092-0225R+50	69
+100	Plano-convex	BK7	092-0225R+100	69
+150	Plano-convex	BK7	092-0225R+150	69
+200	Plano-convex	BK7	092-0225R+200	69
+300	Plano-convex	BK7	092-0225R+300	69
+400	Plano-convex	BK7	092-0225R+400	69
+500	Plano-convex	BK7	092-0225R+500	69
+600	Plano-convex	BK7	092-0225R+600	69
+800	Plano-convex	BK7	092-0225R+800	69
+1000	Plano-convex	BK7	092-0225R+1000	69
+1500	Plano-convex	BK7	092-0225R+1500	69
+2000	Plano-convex	BK7	092-0225R+2000	69
+4000	Plano-convex	BK7	092-0225R+4000	69
+5000	Plano-convex	BK7	092-0225R+5000	69
+50	Plano-convex	UV FS	092-3225R+50	85
+100	Plano-convex	UV FS	092-3225R+100	85
+150	Plano-convex	UV FS	092-3225R+150	85
+200	Plano-convex	UV FS	092-3225R+200	85
+300	Plano-convex	UV FS	092-3225R+300	85
+400	Plano-convex	UV FS	092-3225R+400	85
+500	Plano-convex	UV FS	092-3225R+500	85
+600	Plano-convex	UV FS	092-3225R+600	85
+800	Plano-convex	UV FS	092-3225R+800	85
+1000	Plano-convex	UV FS	092-3225R+1000	85
+1500	Plano-convex	UV FS	092-3225R+1500	85
+2000	Plano-convex	UV FS	092-3225R+2000	85
+4000	Plano-convex	UV FS	092-3225R+4000	85
+5000	Plano-convex	UV FS	092-3225R+5000	85

SPHERICAL MIRRORS. Diameter, D = 50.8 mm. Thickness (edge for plano-concave, center for plano-convex), T = 10.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-100	Plano-concave	BK7	095-0125R-100	164
-150	Plano-concave	BK7	095-0125R-150	164
-200	Plano-concave	BK7	095-0125R-200	164
-250	Plano-concave	BK7	095-0125R-250	164
-300	Plano-concave	BK7	095-0125R-300	164
-400	Plano-concave	BK7	095-0125R-400	164
-500	Plano-concave	BK7	095-0125R-500	164
-600	Plano-concave	BK7	095-0125R-600	164
-800	Plano-concave	BK7	095-0125R-800	164
-1000	Plano-concave	BK7	095-0125R-1000	164
-1500	Plano-concave	BK7	095-0125R-1500	164
-2000	Plano-concave	BK7	095-0125R-2000	164
-2500	Plano-concave	BK7	095-0125R-2500	164
-3000	Plano-concave	BK7	095-0125R-3000	164
-4000	Plano-concave	BK7	095-0125R-4000	164
-5000	Plano-concave	BK7	095-0125R-5000	164
-6000	Plano-concave	BK7	095-0125R-6000	164
-8000	Plano-concave	BK7	095-0125R-8000	164
-10000	Plano-concave	BK7	095-0125R-10000	164

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-100	Plano-concave	UV FS	095-3125R-100	189
-150	Plano-concave	UV FS	095-3125R-150	189
-200	Plano-concave	UV FS	095-3125R-200	189
-250	Plano-concave	UV FS	095-0125R-250	189
-300	Plano-concave	UV FS	095-3125R-300	189
-400	Plano-concave	UV FS	095-3125R-400	189
-500	Plano-concave	UV FS	095-3125R-500	189
-600	Plano-concave	UV FS	095-3125R-600	189
-800	Plano-concave	UV FS	095-3125R-800	189
-1000	Plano-concave	UV FS	095-3125R-1000	189
-1500	Plano-concave	UV FS	095-3125R-1500	189
-2000	Plano-concave	UV FS	095-3125R-2000	189
-2500	Plano-concave	UV FS	095-3125R-2500	189
-3000	Plano-concave	UV FS	095-3125R-3000	189
-4000	Plano-concave	UV FS	095-3125R-4000	189
-5000	Plano-concave	UV FS	095-3125R-5000	189
-6000	Plano-concave	UV FS	095-0125R-6000	189
-8000	Plano-concave	UV FS	095-0125R-8000	189
-10000	Plano-concave	UV FS	095-3125R-10000	189

COATINGS

WINDOWS & FILTERS

MIRRORS

LENSES

PRISMS

POLARIZING OPTICS

UV & IR OPTICS

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+100	Plano-convex	BK7	095-0225R+100	174
+150	Plano-convex	BK7	095-0225R+150	174
+200	Plano-convex	BK7	095-0225R+200	174
+300	Plano-convex	BK7	095-0225R+300	174
+400	Plano-convex	BK7	095-0225R+400	174
+500	Plano-convex	BK7	095-0225R+500	174
+600	Plano-convex	BK7	095-0225R+600	174
+800	Plano-convex	BK7	095-0225R+800	174
+1000	Plano-convex	BK7	095-0225R+1000	174
+1500	Plano-convex	BK7	095-0225R+1500	174
+2000	Plano-convex	BK7	095-0225R+2000	174

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+100	Plano-convex	UV FS	095-3225R+100	199
+150	Plano-convex	UV FS	095-3225R+150	199
+200	Plano-convex	UV FS	095-3225R+200	199
+300	Plano-convex	UV FS	095-3225R+300	199
+400	Plano-convex	UV FS	095-3225R+400	199
+500	Plano-convex	UV FS	095-3225R+500	199
+600	Plano-convex	UV FS	095-3225R+600	199
+800	Plano-convex	UV FS	095-3225R+800	199
+1000	Plano-convex	UV FS	095-3225R+1000	199
+1500	Plano-convex	UV FS	095-3225R+1500	199
+2000	Plano-convex	UV FS	095-3225R+2000	199

SPHERICAL MIRRORS. Diameter, D = 76.2 mm. Thickness (edge for plano-concave, center for plano-convex), T = 12.7 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-200	Plano-concave	BK7	097-0125R-200	250
-300	Plano-concave	BK7	097-0125R-300	250
-400	Plano-concave	BK7	097-0125R-400	250
-500	Plano-concave	BK7	097-0125R-500	250
-600	Plano-concave	BK7	097-0125R-600	250
-800	Plano-concave	BK7	097-0125R-800	250
-1000	Plano-concave	BK7	097-0125R-1000	250
-2000	Plano-concave	BK7	097-0125R-2000	250
-3000	Plano-concave	BK7	097-0125R-3000	250
-200	Plano-concave	UV FS	097-3125R-200	340
-300	Plano-concave	UV FS	097-3125R-300	340
-400	Plano-concave	UV FS	097-3125R-400	340
-500	Plano-concave	UV FS	097-3125R-500	340
-600	Plano-concave	UV FS	097-3125R-600	340
-800	Plano-concave	UV FS	097-3125R-800	340
-1000	Plano-concave	UV FS	097-3125R-1000	340
-2000	Plano-concave	UV FS	097-3125R-2000	340
-3000	Plano-concave	UV FS	097-3125R-3000	340

SPHERICAL MIRRORS. Diameter, D = 101.6 mm. Thickness (edge for plano-concave, center for plano-convex), T = 15.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-300	Plano-concave	BK7	098-0125R-300	590
-400	Plano-concave	BK7	098-0125R-400	590
-500	Plano-concave	BK7	098-0125R-500	590
-600	Plano-concave	BK7	098-0125R-600	590
-800	Plano-concave	BK7	098-0125R-800	590
-1000	Plano-concave	BK7	098-0125R-1000	590
-2000	Plano-concave	BK7	098-0125R-2000	590
-3000	Plano-concave	BK7	098-0125R-3000	590
-300	Plano-concave	UV FS	098-3125R-300	690
-400	Plano-concave	UV FS	098-3125R-400	690
-500	Plano-concave	UV FS	098-3125R-500	690
-600	Plano-concave	UV FS	098-3125R-600	690
-800	Plano-concave	UV FS	098-3125R-800	690
-1000	Plano-concave	UV FS	098-3125R-1000	690
-2000	Plano-concave	UV FS	098-3125R-2000	690
-3000	Plano-concave	UV FS	098-3125R-3000	690

RELATED PRODUCTS

Curved Windows. See page 1.8

Kinematic Mirror Mount 840-0010



Adapter for Mirror at 45° 840-0115



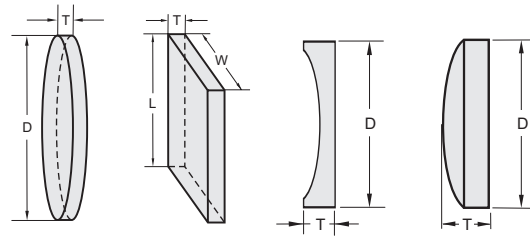
PROTECTED GOLD MIRRORS

FEATURES

- › LIDT – 1.0 J/cm² at 1064 nm, 50 Hz, 11 nsec pulses*
- › Average Reflection >98% for 900 nm – IR
- › BK7, UVFS, Zerodur® substrates available
- › Round, Square and Flat or Spherical Mirrors available
- › OEM capabilities - please contact for special pricing
- › Test samples are available on request
- › Bare Gold coated mirrors are available as an option

* Laser Induced Damage Threshold results are measured according to ISO 21254-2: 1000-on-1 test procedure.

Protected Gold (Au) Mirrors have the highest reflectance in infrared. Enhanced metallic coatings provide greater reflection across the operating bandwidth.



Drawings of flat round, flat rectangular and spherical mirrors

FLAT RECTANGULAR MIRRORS. Substrate type: plano-plano

Width W, mm	Length L, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
15.0	20.0	6.0	BK7	091-0330	55
20.0	30.0	6.0	BK7	092-0330	69
25.4	25.4	6.0	BK7	093-0330	52
25.4	50.8	10.0	BK7	094-0330	95
50.8	50.8	10.0	BK7	095-0330	105
15.0	20.0	6.0	UV FS	091-3330	69
20.0	30.0	6.0	UV FS	092-3330	87
25.4	25.4	6.0	UV FS	093-3330	83
25.4	50.8	10.0	UV FS	094-3330	130
50.8	50.8	10.0	UV FS	095-3330	175

FLAT ROUND MIRRORS. Substrate type: plano-plano

Diameter D, mm	Thickness T, mm	Substrate material	Catalogue number	Price, EUR
12.7	3.0	BK7	091-0030	35
12.7	6.0	BK7	091-0030T6	35
25.4	6.0	BK7	092-0030	43
50.8	8.0	BK7	095-0030	115
76.2	12.7	BK7	097-0030	210
101.6	15.0	BK7	098-0030	430
12.7	3.0	UV FS	091-3030	45
12.7	6.0	UV FS	091-3030T6	45
25.4	6.0	UV FS	092-3030	47
50.8	8.0	UV FS	095-3030	97
76.2	12.7	UV FS	097-3030	245
101.6	15.0	UV FS	098-3030	510

SPHERICAL MIRRORS. Diameter, D = 12.7 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	091-0130R-50	52
-75	Plano-concave	BK7	091-0130R-75	52
-100	Plano-concave	BK7	091-0130R-100	52
-150	Plano-concave	BK7	091-0130R-150	52
-200	Plano-concave	BK7	091-0130R-200	52
-250	Plano-concave	BK7	091-0130R-250	52
-300	Plano-concave	BK7	091-0130R-300	52
-400	Plano-concave	BK7	091-0130R-400	52
-500	Plano-concave	BK7	091-0130R-500	52
-1000	Plano-concave	BK7	091-0130R-1000	52
-1500	Plano-concave	BK7	091-0130R-1500	52
-2000	Plano-concave	BK7	091-0130R-2000	52
-50	Plano-concave	UV FS	091-3130R-50	52
-75	Plano-concave	UV FS	091-3130R-75	62
-100	Plano-concave	UV FS	091-3130R-100	62
-150	Plano-concave	UV FS	091-3130R-150	62
-200	Plano-concave	UV FS	091-3130R-200	62
-250	Plano-concave	UV FS	091-3130R-250	62
-300	Plano-concave	UV FS	091-3130R-300	62
-400	Plano-concave	UV FS	091-3130R-400	62
-500	Plano-concave	UV FS	091-3130R-500	62
-1000	Plano-concave	UV FS	091-3130R-1000	62
-1500	Plano-concave	UV FS	091-3130R-1500	62
-2000	Plano-concave	UV FS	091-3130R-2000	62

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+50	Plano-convex	BK7	091-0230R+50	54
+100	Plano-convex	BK7	091-0230R+100	54
+150	Plano-convex	BK7	091-0230R+150	54
+200	Plano-convex	BK7	091-0230R+200	54
+300	Plano-convex	BK7	091-0230R+300	54
+400	Plano-convex	BK7	091-0230R+400	54
+500	Plano-convex	BK7	091-0230R+500	54
+50	Plano-convex	UV FS	091-3230R+50	65
+100	Plano-convex	UV FS	091-3230R+100	65
+150	Plano-convex	UV FS	091-3230R+150	65
+200	Plano-convex	UV FS	091-3230R+200	65
+300	Plano-convex	UV FS	091-3230R+300	65
+400	Plano-convex	UV FS	091-3230R+400	65
+500	Plano-convex	UV FS	091-2230R+500	65

SPHERICAL MIRRORS. Diameter, D = 25.4 mm. Thickness (edge for plano-concave, center for plano-convex), T = 6.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-50	Plano-concave	BK7	092-0130R-50	95
-75	Plano-concave	BK7	092-0130R-75	95
-100	Plano-concave	BK7	092-0130R-100	95
-150	Plano-concave	BK7	092-0130R-150	95
-200	Plano-concave	BK7	092-0130R-200	95
-250	Plano-concave	BK7	092-0130R-250	95
-300	Plano-concave	BK7	092-0130R-300	95
-400	Plano-concave	BK7	092-0130R-400	95
-500	Plano-concave	BK7	092-0130R-500	95
-600	Plano-concave	BK7	092-0130R-600	95
-750	Plano-concave	BK7	092-0130R-750	95
-800	Plano-concave	BK7	092-0130R-800	95
-1000	Plano-concave	BK7	092-0130R-1000	95
-1500	Plano-concave	BK7	092-0130R-1500	95
-2000	Plano-concave	BK7	092-0130R-2000	95
-2500	Plano-concave	BK7	092-0130R-2500	95
-3000	Plano-concave	BK7	092-0130R-3000	95
-4000	Plano-concave	BK7	092-0130R-4000	95
-5000	Plano-concave	BK7	092-0130R-5000	95
-6000	Plano-concave	BK7	092-0130R-6000	95
-8000	Plano-concave	BK7	092-0130R-8000	95
-50	Plano-concave	UV FS	092-3130R-50	110
-75	Plano-concave	UV FS	092-3130R-75	110
-100	Plano-concave	UV FS	092-3130R-100	110
-150	Plano-concave	UV FS	092-3130R-150	110
-200	Plano-concave	UV FS	092-3130R-200	110
-250	Plano-concave	UV FS	092-3130R-250	110
-300	Plano-concave	UV FS	092-3130R-300	110
-400	Plano-concave	UV FS	092-3130R-400	110
-500	Plano-concave	UV FS	092-3130R-500	110
-600	Plano-concave	UV FS	092-3130R-600	110
-750	Plano-concave	UV FS	092-3130R-750	110
-800	Plano-concave	UV FS	092-3130R-800	110
-1000	Plano-concave	UV FS	092-3130R-1000	110
-1500	Plano-concave	UV FS	092-3130R-1500	110

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-2000	Plano-concave	UV FS	092-3130R-2000	110
-2500	Plano-concave	UV FS	092-3130R-2500	110
-3000	Plano-concave	UV FS	092-3130R-3000	110
-4000	Plano-concave	UV FS	092-3130R-4000	110
-5000	Plano-concave	UV FS	092-3130R-5000	110
-6000	Plano-concave	UV FS	092-3130R-6000	110
-8000	Plano-concave	UV FS	092-3130R-8000	110
+50	Plano-convex	BK7	092-0230R+50	99
+100	Plano-convex	BK7	092-0230R+100	99
+150	Plano-convex	BK7	092-0230R+150	99
+200	Plano-convex	BK7	092-0230R+200	99
+300	Plano-convex	BK7	092-0230R+300	99
+400	Plano-convex	BK7	092-0230R+400	99
+500	Plano-convex	BK7	092-0230R+500	99
+600	Plano-convex	BK7	092-0230R+600	99
+800	Plano-convex	BK7	092-0230R+800	99
+1000	Plano-convex	BK7	092-0230R+1000	99
+1500	Plano-convex	BK7	092-0230R+1500	99
+2000	Plano-convex	BK7	092-0230R+2000	99
+4000	Plano-convex	BK7	092-0230R+4000	99
+5000	Plano-convex	BK7	092-0230R+5000	99
+50	Plano-convex	UV FS	092-3230R+50	115
+100	Plano-convex	UV FS	092-3230R+100	115
+150	Plano-convex	UV FS	092-3230R+150	115
+200	Plano-convex	UV FS	092-3230R+200	115
+300	Plano-convex	UV FS	092-3230R+300	115
+400	Plano-convex	UV FS	092-3230R+400	115
+500	Plano-convex	UV FS	092-3230R+500	115
+600	Plano-convex	UV FS	092-3230R+600	115
+800	Plano-convex	UV FS	092-3230R+800	115
+1000	Plano-convex	UV FS	092-3230R+1000	115
+1500	Plano-convex	UV FS	092-3230R+1500	115
+2000	Plano-convex	UV FS	092-3230R+2000	115
+4000	Plano-convex	UV FS	092-3230R+4000	115
+5000	Plano-convex	UV FS	092-3230R+5000	115

RELATED PRODUCTS

Curved Windows. See page 1.8

Kinematic Mirror Mount
840-0010



Adapter for Mirror at 45°
840-0115



OPTICAL COMPONENTS

NONLINEAR & LASER CRYSTALS

ND:YAG LASERLINE COMPONENTS

FEMTOLINE COMPONENTS

OPTICAL SYSTEMS

OPTO-MECHANICAL COMPONENTS

SPHERICAL MIRRORS. Diameter, D = 50.8 mm. Thickness (edge for plano-concave, center for plano-convex), T = 10.0 mm

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
-100	Plano-concave	BK7	095-0130R-100	174
-150	Plano-concave	BK7	095-0130R-150	174
-200	Plano-concave	BK7	095-0130R-200	174
-250	Plano-concave	BK7	095-0130R-250	174
-300	Plano-concave	BK7	095-0130R-300	174
-400	Plano-concave	BK7	095-0130R-400	174
-500	Plano-concave	BK7	095-0130R-500	174
-600	Plano-concave	BK7	095-0130R-600	174
-800	Plano-concave	BK7	095-0130R-800	174
-1000	Plano-concave	BK7	095-0130R-1000	174
-1500	Plano-concave	BK7	095-0130R-1500	174
-2000	Plano-concave	BK7	095-0130R-2000	174
-2500	Plano-concave	BK7	095-0130R-2500	174
-3000	Plano-concave	BK7	095-0130R-3000	174
-4000	Plano-concave	BK7	095-0130R-4000	174
-5000	Plano-concave	BK7	095-0130R-5000	174
-6000	Plano-concave	BK7	095-0130R-6000	174
-8000	Plano-concave	BK7	095-0130R-8000	174
-10000	Plano-concave	BK7	095-0130R-10000	174
-100	Plano-concave	UV FS	095-3130R-100	199
-150	Plano-concave	UV FS	095-3130R-150	199
-200	Plano-concave	UV FS	095-3130R-200	199
-250	Plano-concave	UV FS	095-3130R-250	199
-300	Plano-concave	UV FS	095-3130R-300	199
-400	Plano-concave	UV FS	095-3130R-400	199
-500	Plano-concave	UV FS	095-3130R-500	199
-600	Plano-concave	UV FS	095-3130R-600	199
-800	Plano-concave	UV FS	095-3130R-800	199
-1000	Plano-concave	UV FS	095-3130R-1000	199
-1500	Plano-concave	UV FS	095-3130R-1500	199
-2000	Plano-concave	UV FS	095-3130R-2000	199
-2500	Plano-concave	UV FS	095-3130R-2500	199
-3000	Plano-concave	UV FS	095-3130R-3000	199
-4000	Plano-concave	UV FS	095-3130R-4000	199
-5000	Plano-concave	UV FS	095-3130R-5000	199
-6000	Plano-concave	UV FS	095-3130R-6000	199
-8000	Plano-concave	UV FS	095-3130R-8000	199
-10000	Plano-concave	UV FS	095-3130R-10000	199

Radius, mm	Substrate type	Substrate material	Catalogue number	Price, EUR
+100	Plano-convex	BK7	095-0230R+100	173
+150	Plano-convex	BK7	095-0230R+150	173
+200	Plano-convex	BK7	095-0230R+200	173
+300	Plano-convex	BK7	095-0230R+300	173
+400	Plano-convex	BK7	095-0230R+400	173
+500	Plano-convex	BK7	095-0230R+500	173
+600	Plano-convex	BK7	095-0230R+600	173
+800	Plano-convex	BK7	095-0230R+800	173
+1000	Plano-convex	BK7	095-0230R+1000	173
+1500	Plano-convex	BK7	095-0230R+1500	173
+2000	Plano-convex	BK7	095-0230R+2000	173
+100	Plano-convex	UV FS	095-3230R+100	209
+150	Plano-convex	UV FS	095-3230R+150	209
+200	Plano-convex	UV FS	095-3230R+200	209
+300	Plano-convex	UV FS	095-3230R+300	209
+400	Plano-convex	UV FS	095-3230R+400	209
+500	Plano-convex	UV FS	095-3230R+500	209
+600	Plano-convex	UV FS	095-3230R+600	209
+800	Plano-convex	UV FS	095-3230R+800	209
+1000	Plano-convex	UV FS	095-3230R+1000	209
+1500	Plano-convex	UV FS	095-3230R+1500	209
+2000	Plano-convex	UV FS	095-3230R+2000	209

COATINGS

WINDOWS & FILTERS

MIRRORS

LENSES

PRISMS

POLARIZING OPTICS

UV & IR OPTICS