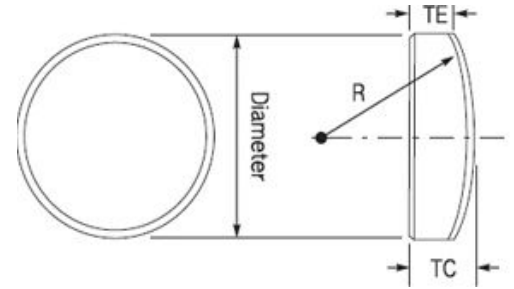


General Specifications

Substrate Material	: BK7 glass / UV grade fused silica
Surface Figure	: $\lambda/2$ along Y dimension $\lambda/4$ per cm along X dimension at 633 nm typical 633nm typical
Surface Quality	: 20-10 laser quality
Dimensional Tolerance	: + 0.00mm, - 0.25mm
Thickness Tolerance	: ± 0.25 mm
Chamber	: 0.35nm at 45° typical
Wedge	: ≤ 3 minutes
Focal Length Tolerance	: $\pm 0.5\%$ typical
Clear Aperture	: Exceeds central 85% of dimension
Damage Threshold	: 10J/cm ² , 20ns, 20Hz at 1064nm



Model Specifications

Part Numbers	Focal length (mm)	Diameter (mm)	Radius R (mm)	TC (mm)	TE (mm)
CPXR-20-15-M- λ	20	15	10.2	6	2.7
CPXR-25-15-M- λ	25	15	12.7	6.5	4
CPXR-25-20-M- λ	25	20	12.7	8	3.1
CPXR-30-15-M- λ	30	15	15.3	5	3
CPXR-30-20-M- λ	30	20	15.3	7	3.2 ⁽¹⁾ (3.3 ⁽²⁾)
CPXR-30-25-M- λ	30	25.4	15.3	11	4.2
CPXR-40-15-M- λ	40	15	20.3	5	3.6
CPXR-40-20-M- λ	40	20	20.3	6	3.4
CPXR-40-25-M- λ	40	25.4	20.3	9	4.5
CPXR-50-20-M- λ	50	20	25.4	6	3.9
CPXR-50-25-M- λ	50	25.4	25.4	7.4	4
CPXR-50-30-M- λ	50	30	25.4	9	4.1
CPXR-60-20-M- λ	60	20	30.5	5	3.3
CPXR-60-25-M- λ	60	25.4	30.5	7	4.2
CPXR-60-30-M- λ	60	30	30.5	8	4.1
CPXR-75-20-M- λ	75	20	38.1	5	3.7
CPXR-75-25-M- λ	75	25.4	38.1	6.2	4
CPXR-75-30-M- λ	75	30	38.1	7	3.9
CPXR-75-51-M- λ	75	50.8	38.1	12.7	3
CPXR-100-20-M- λ	100	20	50.9	5	4
CPXR-100-25-M- λ	100	25.4	50.9	5.6	4
CPXR-100-30-M- λ	100	30	50.9	6	3.7
CPXR-100-51-M- λ	100	50.8	50.9	10	3.2
CPXR-150-20-M- λ	150	20	76.3	5	4.3
CPXR-150-25-M- λ	150	25.4	76.3	5.1	4
CPXR-150-30-M- λ	150	30	76.3	6	4.5
CPXR-150-51-M- λ	150	50.8	76.3	8	3.6

(1) Material : UV Grade FS

(2) Material : BK7

Order/Product Nomenclature



Ordering example : CPXR-75-25-BK-NIR1
: CPXR-75-25-UV-1064

Wavelengths for standard antireflection coatings

Laser line

Wavelength (nm)	Material
193	UV Grade FS
248	UV Grade FS
266	UV Grade FS
308	UV Grade FS
355	UV Grade FS
532	UV Grade FS / BK7
633	BK7
780	BK7
830	BK7
1064	UV Grade FS / BK7
1550	UV Grade FS / BK7

*R < 0.25% at design Wavelength, 0°

*R < 0.75% at design Wavelength, 45°

Broadband

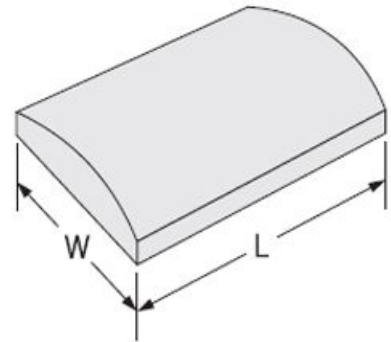
Wavelength range(nm)	Coating Code	Material
248-355	UV	UV grade FS
355-532	UVIS	UV grade FS
425-675	VIS	UV grade FS
670-1064	NIR1	UV grade FS
1050-1600	NIR2	UV grade FS

*R < 0.5% at average over very wide ranges

Material	Material code
UB Grade Fused Silica	UV
BK7 Glass	BK

General Specifications

Substrate Material	: BK7 glass / UV grade fused silica / UV CaF ₂
Surface Figure	: $\lambda/2$ along Y dimension $\lambda/4$ per cm along X dimension at 633 nm typical
Surface Quality	: 20-10 laser quality
Dimensional Tolerance	: + 0.00mm, - 0.25mm
Thickness Tolerance	: ± 0.25 mm
Chamber	: 0.35nm at 45° typical
Wedge	: ≤ 3 minutes
Focal Length Tolerance	: $\pm 0.5\%$ typical
Clear Aperture	: Exceeds central 85% of dimension
Damage Threshold	: 10J/cm ² , 20ns, 20Hz at 1064nm



Square Plano Convex Lenses

Part Numbers	Focal length f (mm)	Dimension W (mm)	Dimension W (mm)
CPXS-20-1515-M- λ	20	15	15
CPXS-25-1515-M- λ	25	15	15
CPXS-25-2020-M- λ	25	20	20
CPXS-30-1515-M- λ	30	15	15
CPXS-30-2020-M- λ	30	20	20
CPXS-30-2525-M- λ	30	25.4	25.4
CPXS-40-1515-M- λ	40	15	15
CPXS-40-2020-M- λ	40	20	20
CPXS-40-2525-M- λ	40	25.4	25.4
CPXS-50-2020-M- λ	50	20	20
CPXS-50-2525-M- λ	50	25.4	25.4
CPXS-50-3030-M- λ	50	30	30
CPXS-60-2020-M- λ	60	20	20
CPXS-60-2525-M- λ	60	25.4	25.4
CPXS-60-3030-M- λ	60	30	30
CPXS-75-2020-M- λ	75	20	20
CPXS-75-2525-M- λ	75	25.4	25.4
CPXS-75-3030-M- λ	75	30	30
CPXS-75-5151-M- λ	75	50.8	50.8
CPXS-80-2020-M- λ	80	20	20
CPXS-100-2020-M- λ	100	20	20
CPXS-100-2525-M- λ	100	25.4	25.4
CPXS-100-3030-M- λ	100	30	30
CPXS-100-5151-M- λ	100	50.8	50.8
CPXS-125-2020-M- λ	125	20	20
CPXS-125-2525-M- λ	125	25.4	25.4
CPXS-125-3030-M- λ	125	30	30
CPXS-125-5050-M- λ	125	50.8	50.8
CPXS-150-2020-M- λ	150	20	20
CPXS-150-2525-M- λ	150	25.4	25.4
CPXS-150-3030-M- λ	150	30	30
CPXS-150-5050-M- λ	150	50.8	50.8
CPXS-200-2020-M- λ	200	20	20
CPXS-200-2525-M- λ	200	25.4	25.4
CPXS-200-3030-M- λ	200	30	30
CPXS-200-5050-M- λ	200	50.8	50.8
CPXS-250-2020-M- λ	200	20	20

Wavelengths for standard antireflection coatings

Laser line

Wavelength (nm)	Material
193	UV Grade FS
248	UV Grade FS
266	UV Grade FS
308	UV Grade FS
355	UV Grade FS
532	UV Grade FS / BK7
633	BK7
780	BK7
830	BK7
1064	UV Grade FS / BK7
1550	UV Grade FS / BK7

*R < 0.25% at design Wavelength, 0°

*R < 0.75% at design Wavelength, 45°

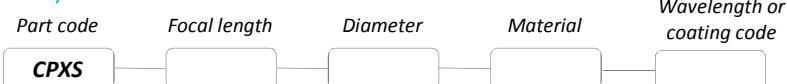
Broadband

Wavelength range (nm)	Coating Code	Material
248-355	UV	UV grade FS
355-532	UVIS	UV grade FS
425-675	VIS	UV grade FS
670-1064	NIR1	UV grade FS
1050-1600	NIR2	UV grade FS

* R<0.5% average over very wide ranges

Material	Material code
UV CaF ₂	VC
UB Grade Fused Silica	UV
BK7 Glass	BK

Order/Product Nomenclature



Ordering example : CPXS-75-25-BK-NIR1
 : CPXS-75-25-UV-1064

Square Plano Convex Lenses

Part Number	Focal length <i>f</i> (mm)	Dimension <i>W</i> (mm)	Dimension <i>L</i> (mm)
CPXS-250-2525-M-λ	250	25.4	25.4
CPXS-250-3030-M-λ	250	30	30
CPXS-250-5151-M-λ	250	50.8	50.8
CPXS-300-2020-M-λ	300	20	20
CPXS-300-2525-M-λ	300	25.4	25.4
CPXS-300-3030-M-λ	300	30	30
CPXS-300-5151-M-λ	300	50.8	50.8
CPXS-400-2020-M-λ	400	20	20
CPXS-400-2525-M-λ	400	25.4	25.4
CPXS-400-3030-M-λ	400	30	30
CPXS-400-5151-M-λ	400	50.8	50.8
CPXS-500-2020-M-λ	500	20	20
CPXS-500-2525-M-λ	500	25.4	25.4
CPXS-500-3030-M-λ	500	30	30
CPXS-500-5151-M-λ	500	50.8	50.8
CPXS-750-2020-M-λ	750	20	20
CPXS-750-2525-M-λ	750	25.4	25.4
CPXS-750-3030-M-λ	750	30	30
CPXS-750-5151-M-λ	750	50.8	50.8
CPXS-1000-2020-M-λ	1000	20	20
CPXS-1000-2525-M-λ	1000	25.4	25.4
CPXS-1000-3030-M-λ	1000	30	30
CPXS-1000-5151-M-λ	1000	50.8	50.8
CPXS-2000-5151-M-λ	2000	50.8	50.8
CPXS-10000-5151-M-λ	10000	50.8	50.8

Rectangular Plano Convex Lenses

Part Number	Focal length <i>f</i> (mm)	Dimension <i>W</i> (mm)	Dimension <i>L</i> (mm)
CPXS-6-0513-M-λ	6	4.8	12.7
CPXS-10-0613-M-λ	10	6.4	12.7
CPXS-13-0613-M-λ	12.7	6.4	12.7
CPXS-20-0613-M-λ	20	6.4	12.7
CPXS-20-1525-M-λ	20	15	25
CPXS-25-1525-M-λ	25	15	25
CPXS-25-1325-M-λ*	25	12.7	25.4
CPXS-25-2030-M-λ	25	20	30
CPXS-25-2040-M-λ	25	20	40
CPXS-30-1525-M-λ	30	15	25
CPXS-30-2030-M-λ	30	20	30
CPXS-30-2040-M-λ	30	20	40
CPXS-30-2540-M-λ	30	25.4	40
CPXS-38-2540-M-λ	37.5	25.4	40
CPXS-40-1525-M-λ	40	15	25
CPXS-40-2030-M-λ	40	20	30
CPXS-40-2040-M-λ	40	20	40
CPXS-40-2540-M-λ*	40	25.4	40
CPXS-50-2030-M-λ	50	20	30
CPXS-50-2040-M-λ	50	20	40

Rectangular Plano Convex Lenses

Part Number	Focal length <i>f</i> (mm)	Dimension <i>W</i> (mm)	Dimension <i>L</i> (mm)
CPXS-50-2540-M-λ*	50	25.4	40
CPXS-50-3040-M-λ	50	30	40
CPXS-60-2030-M-λ	60	20	30
CPXS-60-2040-M-λ	60	20	40
CPXS-60-2540-M-λ*	60	25.4	40
CPXS-60-3040-M-λ	60	30	40
CPXS-75-2030-M-λ	75	20	30
CPXS-75-2040-M-λ	75	20	40
CPXS-75-2540-M-λ*	75	25.4	40
CPXS-75-3040-M-λ	75	30	40
CPXS-100-2030-M-λ*	100	20	30
CPXS-100-2040-M-λ	100	20	40
CPXS-100-2540-M-λ*	100	25.4	40
CPXS-100-3040-M-λ	100	30	40
CPXS-125-2030-M-λ	125	20	30
CPXS-125-2040-M-λ	125	20	40
CPXS-125-2540-M-λ	125	25.4	40
CPXS-125-3040-M-λ	125	30	40
CPXS-150-2030-M-λ*	150	20	30
CPXS-150-2040-M-λ	150	20	40
CPXS-150-2540-M-λ*	150	25.4	40
CPXS-150-3040-M-λ	150	30	40
CPXS-200-2030-M-λ	200	20	30
CPXS-200-2040-M-λ	200	20	40
CPXS-200-2540-M-λ*	200	25.4	40
CPXS-200-3040-M-λ	200	30	40
CPXS-250-2030-M-λ	250	20	30
CPXS-250-2040-M-λ	250	20	40
CPXS-250-2540-M-λ*	250	25.4	40
CPXS-250-3040-M-λ	250	30	40
CPXS-300-2030-M-λ	300	20	30
CPXS-300-2040-M-λ	300	20	40
CPXS-300-2540-M-λ	300	25.4	40
CPXS-300-3040-M-λ	300	30	40
CPXS-400-2030-M-λ	400	20	30
CPXS-400-2040-M-λ	400	20	40
CPXS-400-2540-M-λ	400	25.4	40
CPXS-400-3040-M-λ	400	30	40
CPXS-500-2030-M-λ	500	20	30
CPXS-500-2040-M-λ	500	20	40
CPXS-500-2540-M-λ*	500	25.4	40
CPXS-500-3040-M-λ	500	30	40
CPXS-750-2030-M-λ	750	20	30
CPXS-750-2040-M-λ	750	20	40
CPXS-750-2540-M-λ*	750	25.4	40
CPXS-750-3040-M-λ	750	30	40
CPXS-1000-2030-M-λ	1000	20	30
CPXS-1000-2040-M-λ	1000	20	40
CPXS-1000-2540-M-λ*	1000	25.4	40
CPXS-1000-3040-M-λ	1000	30	40

* Available [UV CaF₂] only this model