Uv fused silica plano-convex lenses

Spherical plano convex lenses of fused silica are mostly used for UV monochromatic lights. Fused silica has almost same performance of transmittance with BK7 in visual and near IR, but has higher performance than BK7 in UV.

These lenses are useful when parallel beams are converged or lights from point sources are converted to parallel beams, namely at infinite conjugate ratios.

Non-coated and AR coated products are available as well.

Standard Specifications:

Optical Material: UV Grade Fused Silica

Diameter Tolerance: +0.0, -0.15mm

Design Wavelength: 546.1nm

Design Index: 1.46008±0.00005nm

Paraxial Focal Length: ±2%

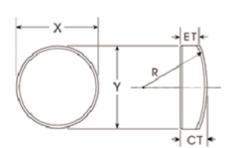
Centration: 3 arc minutes

Clear Aperture: >85%

Surface Quality: 60-40 scratch and dig Wavefront Distortion: lambda/4 at 632.8nm

Bevel: <0.25mm X 45°

Coating: available upon request



Standard UV Fused Silica Plano-Convex Lenses:

Dia(mm)	f(mm)	R1(mm)	tc(mm)	te(mm)	Fb(mm)	Product Number
12.7	15.0	6.90	6.2	2.0	10.8	UQT-PLCXF0101
12.7	20.0	9.20	4.5	2.0	16.9	UQT-PLCXF0102
12.7	25.0	11.50	3.9	2.0	22.3	UQT-PLCXF0103
12.7	30.0	13.80	3.6	2.0	27.5	UQT-PLCXF0104
12.7	40.0	18.40	3.1	2.0	37.9	UQT-PLCXF0105
25.4	35.0	16.10	8.2	2.0	29.4	UQT-PLCXF0106
25.4	50.0	23.00	5.8	2.0	46.0	UQT-PLCXF0107
25.4	75.0	34.51	4.4	2.0	72.0	UQT-PLCXF0108
25.4	100.0	46.01	3.8	2.0	97.4	UQT-PLCXF0109
25.4	150.0	69.01	3.2	2.0	147.8	UQT-PLCXF0110
25.4	175.0	80.51	3.0	2.0	172.9	UQT-PLCXF0111
25.4	200.0	92.02	2.9	2.0	198.0	UQT-PLCXF0112
25.4	250.0	115.02	2.7	2.0	248.2	UQT-PLCXF0113
25.4	300.0	138.02	2.6	2.0	298.2	UQT-PLCXF0114
25.4	500.0	230.04	2.4	2.0	498.4	UQT-PLCXF0115
25.4	1000.0	460.08	2.2	2.0	998.5	UQT-PLCXF0116
38.0	50.0	23.00	13.0	3.0	41.1	UQT-PLCXF0117

38.0	100.0	46.01	7.1	3.0	95.1	UQT-PLCXF0118
38.0	150.0	69.01	5.7	3.0	146.1	UQT-PLCXF0119
38.0	200.0	92.02	5.0	3.0	196.6	UQT-PLCXF0120
38.0	350.0	161.03	4.1	3.0	347.2	UQT-PLCXF0121
38.0	500.0	230.04	3.8	3.0	497.4	UQT-PLCXF0122

Please Contact ultiQuest for other dimensions in prototype and production quantities.

NOTES!

- $\ensuremath{\,\blacksquare\,}$ The edge thicknesses fare theoretical values not including chamfer.
- $\ensuremath{\blacksquare}$ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.