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TECHSPEC[®] 12.0mm Dia. x -100 FL, UV-AR Coated, UV Plano-Concave Lens



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#88-037** 20+ In Stock

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1

+

A\$251²⁰

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Volume Pricing	
Qty 1-5	A\$251.20 each
Qty 6-25	A\$201.60 each
Qty 26-49	A\$188.80 each
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General	
Plano-Concave Lens	Type:
Max. Flat Annulus is 0.3mm	Note:

Physical & Mechanical Properties	
12.00 +0.0/-0.025	Diameter (mm):
2.00	Center Thickness CT (mm):
±0.05	Center Thickness Tolerance (mm):
<1	Centering (arcmin):
11	Clear Aperture CA (mm):
2.36	Edge Thickness ET (mm):
Optical Properties	
-100.00	Effective Focal Length EFL (mm):
Fused Silica (Corning 7980)	Substrate: ☐
8.33	f/#:
0.06	Numerical Aperture NA:
UV-AR (250-425nm)	Coating:
250 - 425	Wavelength Range (nm):
-101.37	Back Focal Length BFL (mm):
R _{abs} ≤1.0% @ 250 - 425nm R _{avg} ≤0.75% @ 250 - 425nm R _{avg} ≤0.5% @ 370 - 420nm	Coating Specification:
587.6	Focal Length Specification Wavelength (nm):
±1	Focal Length Tolerance (%):
-45.85	Radius R ₁ (mm):
40-20	Surface Quality:
3 J/cm ² @ 355nm, 10ns	Damage Threshold, Reference: ☐
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:

Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

Product Details

- Negative Focal Lengths for Beam Expansion or Light Projection Applications
 - Wavelength Range of 200 - 2200nm
 - Popular UV-AR Coating Option Available
- TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are high performance UV optic elements, manufactured utilizing state of the art CNC equipment. Zygo's GPI-XP Interferometer is used to assure the surface accuracy and performance of these UV optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. In addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica also exhibits an exceptional inclusion specification and chemical purity. TECHSPEC® UV Fused Silica Plano-Concave (PCV) Lenses are an ideal choice for many laser and imaging applications, particularly those involving ultraviolet wavelengths. A broadband anti-reflection coating is available for optimized throughput in the ultraviolet spectrum.

Technical Information



UV FS Transmission Curve



FUSED SILICA	
Uncoated Fused Silica Typical Transmission The graph shows the typical transmission of a 3mm thick, uncoated fused silica window. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. The curve is relatively flat at approximately 94% transmittance from 200 to 1400 nm, with a small dip at 1400 nm, then rises slightly to about 95% between 1800 and 2000 nm, before dropping sharply after 2000 nm.	Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra. Click Here to Download Data
Fused Silica with MgF₂ Coating Typical Transmission The graph shows the typical transmission of a 3mm thick fused silica window with a MgF₂ (400-700nm) coating. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. A blue shaded region indicates the coating design wavelength range from 400 to 700 nm. The transmission is around 93% at 200 nm, rises to a peak of about 97% at 500 nm, then gradually decreases to about 95% at 1400 nm, with a small dip at 1400 nm, then rises slightly to about 95% between 1800 and 2000 nm, before dropping sharply after 2000 nm.	Typical transmission of a 3mm thick fused silica window with MgF₂ (400-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 1.75\% @ 400 - 700\text{nm}$ (N-BK7) Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with UV-AR Coating Typical Transmission The graph shows the typical transmission of a 3mm thick fused silica window with a UV-AR (250-425nm) coating. The y-axis is Transmittance T (%) from 75 to 100. The x-axis is Wavelength (nm) from 200 to 2200. A blue shaded region indicates the coating design wavelength range from 250 to 425 nm. The transmission rises sharply from 200 nm to about 99% at 250 nm, remains high (above 98%) until 425 nm, then gradually decreases to about 75% at 2000 nm, before slightly rising to about 76% at 2200 nm.	Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.0\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.75\% @ 250 - 425\text{nm}$ $R_{avg} \leq 0.5\% @ 370 - 420\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

	
Fused Silica with UV-VIS Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 1.0\% \text{ @ } 350 - 450\text{nm}$$R_{avg} \leq 1.5\% \text{ @ } 250 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS-EXT Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.5\% \text{ @ } 350 - 700\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS-NIR Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{abs} \leq 0.25\% \text{ @ } 880\text{nm}$$R_{avg} \leq 1.25\% \text{ @ } 400 - 870\text{nm}$$R_{avg} \leq 1.25\% \text{ @ } 890 - 1000\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
Fused Silica with VIS 0° Coating Typical Transmission 	Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI. The blue shaded region indicates the coating design wavelength range, with the following specification: $R_{avg} \leq 0.4\% \text{ @ } 425 - 675\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

