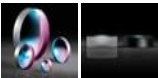


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TECHSPEC[®] 12mm Dia. x -20mm FL, UV-AR Coated, UV DCV Lens



UV Fused Silica Plano-Concave (PCV) Lenses



Stock **#48-058** [CONTACT US](#)

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-1+

€160^{.00}

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Volume Pricing	
Qty 1-5	€160,00 each
Qty 6-25	€128,00 each
Qty 26-49	€121,00 each
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Product Downloads

General

Double-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):
11.0	Clear Aperture CA (mm):
3.78	Edge Thickness ET (mm):

Optical Properties	
-20.00	Effective Focal Length EFL (mm):
Fused Silica (Corning 7980)	Substrate: ☐
1.67	f/#:
0.30	Numerical Aperture NA:
UV-AR (250-425nm)	Coating:
250 - 425	Wavelength Range (nm):
-20.67	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):
±2	Focal Length Tolerance (%):
-18.64	Radius R ₁ =R ₂ (mm):
40-20	Surface Quality:
3 J/cm² @ 355nm, 10ns	Damage Threshold, Reference: ☐
1.5λ	Power (P-V) @ 632.8nm:
λ/4	Irregularity (P-V) @ 632.8nm:

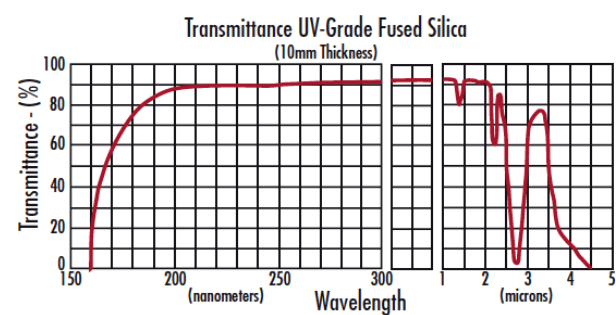
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:

Product Details

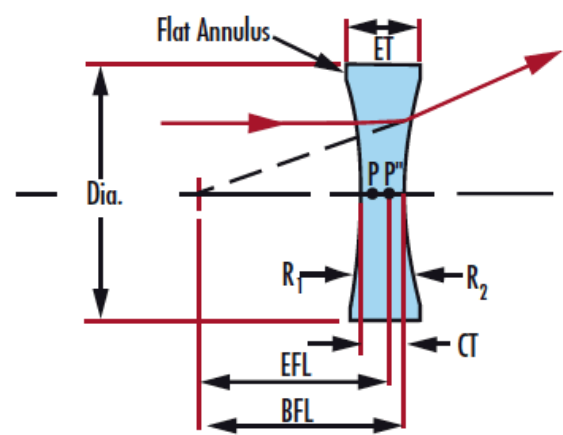
- Negative Focal Lengths for Beam Expansion or Light Projection Applications
- Wavelength Range of 200 - 2200nm
- Popular UV-AR Coating Option Available

TECHSPEC® UV Fused Silica Double-Concave (DCV) Lenses are manufactured utilizing state-of-the-art CNC equipment. Zygo’s GPI-XP Interferometer is used to ensure the surface accuracy and performance of these optics. UV Grade lenses are precision manufactured using research-grade synthetic fused silica. TECHSPEC® UV Fused Silica Double-Concave (DCV) Lenses, in addition to providing excellent transmission characteristics and higher operating temperatures, synthetic fused silica lenses also exhibit exceptional inclusion specification and chemical purity. These lenses make a superior 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.

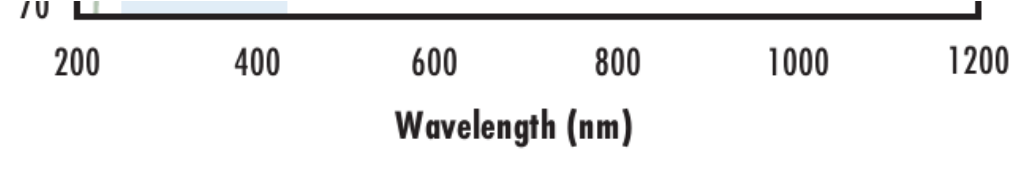
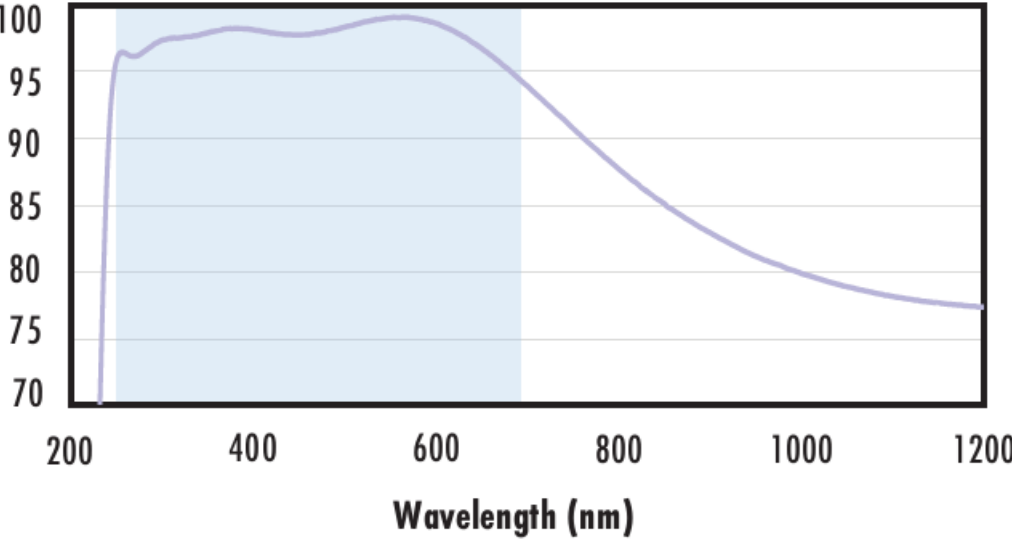
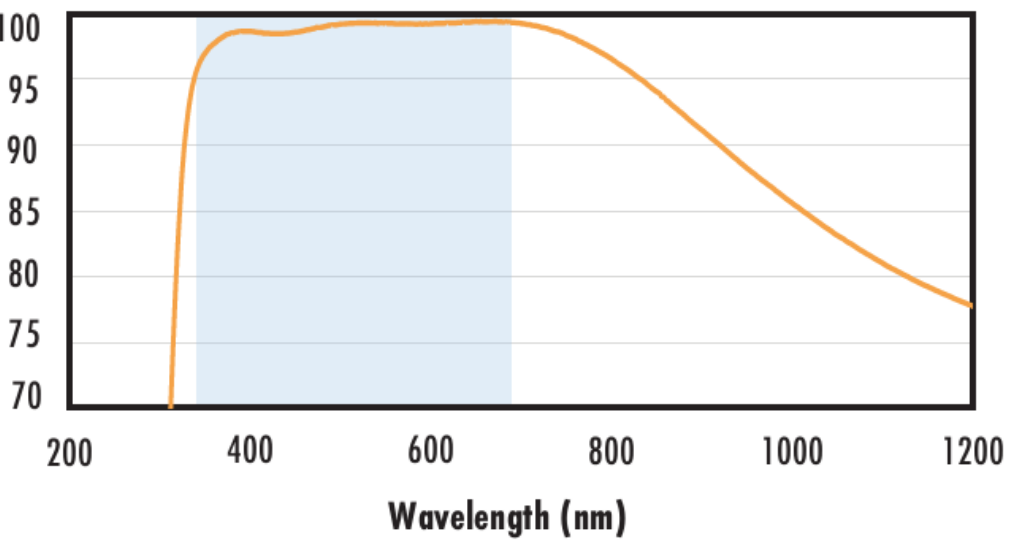
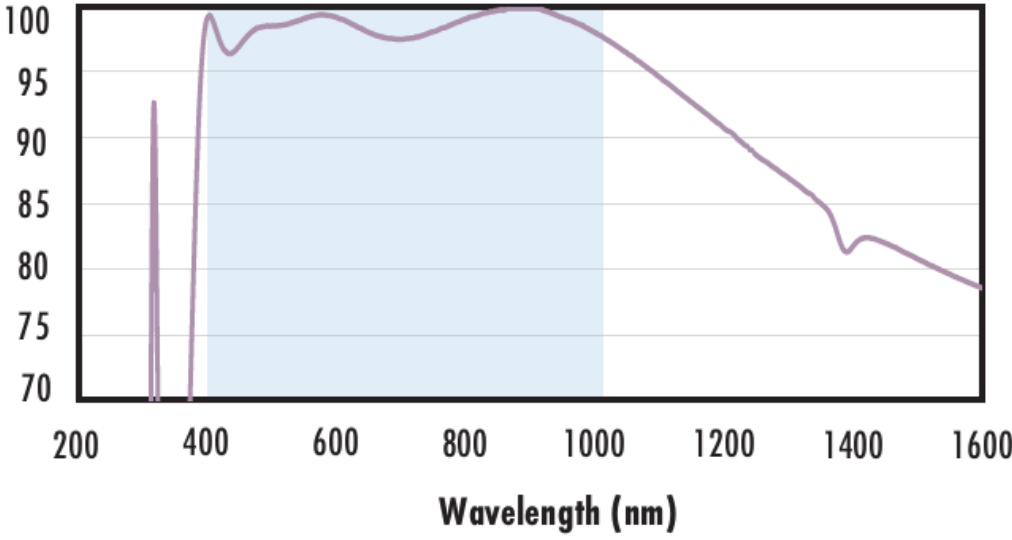
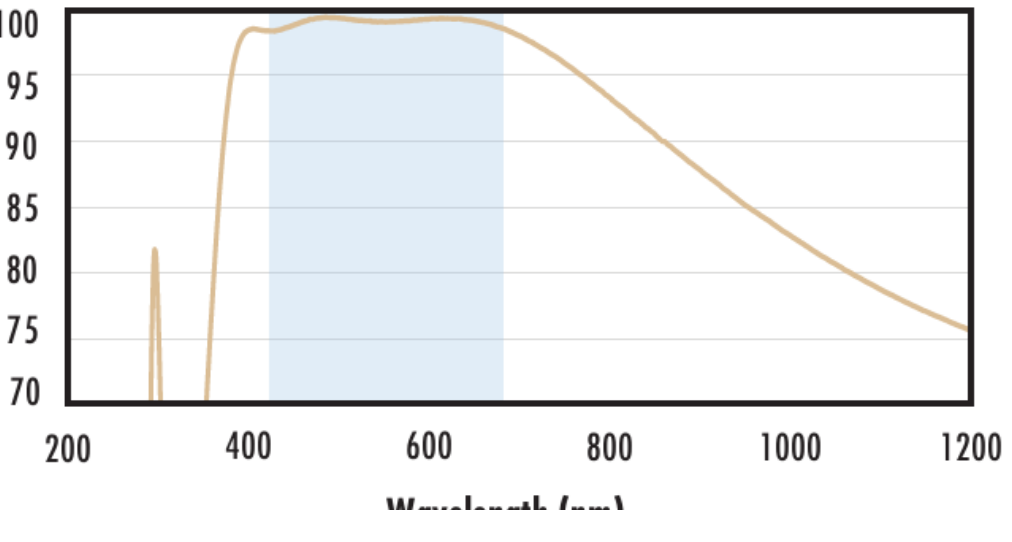
Technical Information



UV FS Transmission Curve



FUSED SILICA		
Uncoated Fused Silica Typical Transmission		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		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		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

