

TECHSPEC®

Plankonkave Linse aus UV-Quarzglas, 12 mm D. x -100 mm eff. Brennweite, UV-AR-beschichtet



UV Fused Silica Plano-Concave (PCV) Lenses



Produkt **#71-101** **1 In Stock**

[Andere Beschichtungen](#)

- 1 + €157⁰⁰

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€157,00 stückpreis
Stk. 6-25	€126,00 stückpreis
Stk. 26-49	€118,00 stückpreis
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ⓘ Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Typ:

Plano-Concave Lens

Hinweis:

Max. Flat Annulus is 0.3mm

Physikalische und mechanische Eigenschaften

Durchmesser (mm):
12.00 +0.0/-0.025

Mittendicke CT (mm):
2.00 ±0.05

Zentrierung (Bogenminuten):
<1

Freie Apertur CA (mm):
11.00

Randdicke ET (mm):
2.36

Optische Eigenschaften

Effektive Brennweite EFL (mm):
-100.00

Substrat:
Fused Silica (Corning 7980)

Blende:
8.33

Numerische Apertur NA:
0.06

Beschichtung:
UV-VIS (250-700nm)

Wellenlängenbereich (nm):
250 - 700

Hintere Brennweite BFL (mm):
-101.37

Beschichtungsspezifikation:
R_{abs} ≤1.0% @ 350 - 450nm
R_{avg} ≤1.5% @ 250 - 700nm

Designwellenlänge Brennweite (nm):
587.6 ±1

Radius R₁ (mm):
45.84

Oberflächenqualität:
40-20

Power (P-V) @ 632,8 nm:
1.5λ

Unregelmäßigkeit (P-V) @ 632,8 nm:
λ/4

Konformität mit Standards

Konformitätszertifikat:
[Anzeigen](#)

Gewünschte Spezifikationen nicht dabei?

Edmund Optics bietet einen umfangreichen kundenspezifischen Fertigungsservice für Optik- und Bildverarbeitungskomponenten an, speziell hergestellt für Ihre Anwendungsanforderungen. Wir ermöglichen flexible Lösungen für Ihre Bedürfnisse – von der Prototypenphase bis zur Serienfertigung. Unsere erfahrenen IngenieurInnen freuen sich auf die Zusammenarbeit und unterstützen Sie bei jedem Projektschritt.

Unser Service beinhaltet:

- Kundenspezifische Abmessungen, Materialien und mehr
- Hochpräzise Oberflächenqualität und -ebenheit
- Enge Toleranzen und komplexe Formen
- Skalierbare Produktion – vom Prototypen zur Serie

Erfahren Sie mehr über unsere [kundenspezifischen Fertigungsmöglichkeiten](#) oder senden Sie [hier](#) eine Anfrage.

Produktdetails

- Negative Brennweiten zur Strahlaufweitung oder Lichtprojektion
- Wellenlängenbereich von 200 - 2200 nm
- UV-AR-Beschichtungen verfügbar

Diese hochqualitativen optischen Elemente werden mit CNC-Maschinen nach dem neuesten Stand der Technik gefertigt. Die UV-Linsen werden aus synthetischem Quarzglas hergestellt. Zusätzlich zur exzellenten Transmission und hohen Temperaturbeständigkeit, bieten die Linsen eine besonders hohe chemische Reinheit. Diese Linsen sind die ideale Wahl für viele Laseranwendungen und bildgebende Anwendungen, besonders im UV-Bereich. Die breitbandige Antireflexbeschichtung ermöglicht eine höhere Transmission im UV-Bereich.

Technische Informationen



UV FS Transmission Curve

FUSED SILICA	
<h3>Uncoated Fused Silica Typical Transmission</h3> <p>The graph shows typical transmission for uncoated fused silica. The y-axis is Transmittance T (%) from 70 to 100. The x-axis is Wavelength (nm) from 200 to 2200. The transmission is high, around 92-95%, with a small dip at approximately 1400 nm.</p>	<p>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</p> <p>Click Here to Download Data</p>
<h3>Fused Silica with MgF_2 Coating Typical Transmission</h3> <p>The graph shows typical transmission for fused silica with MgF_2 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 nm to 700 nm. The transmission is high, around 95-98%, with a small dip at approximately 1400 nm.</p>	<p>Typical transmission of a 3mm thick fused silica window with MgF_2 (400-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{avg} \leq 1.75\% @ 400 - 700nm$ (N-BK7)</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>
<h3>Fused Silica with UV-AR Coating Typical Transmission</h3> <p>The graph shows typical transmission for fused silica with UV-AR 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 nm to 425 nm. The transmission is high, around 95-100%, in the UV region and drops off significantly in the infrared region.</p>	<p>Typical transmission of a 3mm thick fused silica window with UV-AR (250-425nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p>$R_{abs} \leq 1.0\% @ 250 - 425nm$ $R_{avg} \leq 0.75\% @ 250 - 425nm$ $R_{avg} \leq 0.5\% @ 370 - 420nm$</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p>Click Here to Download Data</p>



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](#)

Wavelength (nm)

Fused Silica with YAG-BBAR Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 0.25\%$ @ 532nm
 $R_{abs} \leq 0.25\%$ @ 1064nm
 $R_{avg} \leq 1.0\%$ @ 500 - 1100nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Fused Silica with NIR I Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 0.5\%$ @ 600 - 1050nm

Data outside this range is not guaranteed and is for reference only.

[Click Here to Download Data](#)

Fused Silica with NIR II Coating Typical Transmission



Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) coating at 0° AOI.

The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{abs} \leq 1.5\%$ @ 750 - 800nm
 $R_{abs} \leq 1.0\%$ @ 800 - 1550nm
 $R_{avg} \leq 0.7\%$ @ 750 - 1550nm

Data outside this range is not guaranteed and is for reference only.

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