

TECHSPEC<sup>®</sup>

Plankonvexe Linse aus UV-Quarzglas, 12 mm Durchm. x 100 mm BW, UV-VIS-beschichtet



UV Fused Silica Plano-Convex (PCX) Lenses



Produkt **#48-820** 15 In Stock

-

1

+

€149<sup>00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €149,00 stückpreis              |
| Stk. 6-25     | €119,00 stückpreis              |
| Stk. 26-49    | €112,00 stückpreis              |
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📌 Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

Produktdetails

Plano-Convex Lens

Typ:

Physikalische und mechanische Eigenschaften

|                      |                             |
|----------------------|-----------------------------|
| 12.00 +0.0/-0.025    | Durchmesser (mm):           |
| <1                   | Zentrierung (Bogenminuten): |
| 2.44 ±0.05           | Mittendicke CT (mm):        |
| 2.05                 | Randdicke ET (mm):          |
| 11                   | Freie Apertur CA (mm):      |
| Protective as needed | Fase:                       |

Optische Eigenschaften

|                                                                              |                                                                                                                |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|
| 100.00 @587.6nm                                                              | Effektive Brennweite EFL (mm):                                                                                 |
| 98.33                                                                        | Hintere Brennweite BFL (mm):                                                                                   |
| UV-VIS (250-700nm)                                                           | Beschichtung:                                                                                                  |
| R <sub>abs</sub> ≤1.0% @ 350 - 450nm<br>R <sub>avg</sub> ≤1.5% @ 250 - 700nm | Beschichtungsspezifikation:                                                                                    |
| Fused Silica (Corning 7980)                                                  | Substrat:                     |
| 40-20                                                                        | Oberflächenqualität:                                                                                           |
| 1.5λ                                                                         | Power (P-V) @ 632,8 nm:                                                                                        |
| λ/4                                                                          | Unregelmäßigkeit (P-V) @ 632,8 nm:                                                                             |
| ±1                                                                           | Toleranz Brennweite (%):                                                                                       |
| 45.85                                                                        | Radius R <sub>1</sub> (mm):                                                                                    |
| 8.33                                                                         | Blende:                                                                                                        |
| 0.06                                                                         | Numerische Apertur NA:                                                                                         |
| 250 - 700                                                                    | Wellenlängenbereich (nm):                                                                                      |
| 3 J/cm <sup>2</sup> @ 355nm, 10ns<br>5 J/cm <sup>2</sup> @ 532nm, 10ns       | Zerstörschwelle, Referenz:  |

Konformität mit Standards

|          |                         |
|----------|-------------------------|
| Konform  | RoHS 2015:              |
| Anzeigen | Konformitätszertifikat: |
| Konform  | Reach 235:              |

## Produktdetails

- AR-Beschichtung bietet <1,5% Reflexion pro Oberfläche für 250-700 nm
  - Präzise Quarzglassubstrate
  - Verschiedene Beschichtungen verfügbar: [Unbeschichtet](#), [MgF<sub>2</sub>](#), [UV-AR](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), [NIR I](#), [NIR II](#) und [VIS-EXT](#)
- TECHSPEC® Plankonvexe Linsen (PCX) aus UV-Quarzglas zeichnen sich durch Präzisionsspezifikationen und eine Vielzahl von Beschichtungsmöglichkeiten auf einem breitbandigen Substrat aus. Quarzglas wird üblicherweise in Anwendungen von Ultraviolett (UV) bis Nahinfrarot (NIR) verwendet. Aufgrund seines niedrigen Brechungsindex, seines niedrigen Wärmeausdehnungskoeffizienten und seiner geringen Einschlüsse ist es ideal für Laseranwendungen und raue Umgebungsbedingungen. TECHSPEC Plankonvexe Linsen (PCX) aus UV-Quarzglas mit branchenweit führenden Spezifikationen für Durchmesser und Zentrierung eignen sich ideal für die Integration in anspruchsvolle Bildgebungs- und Messanwendungen.

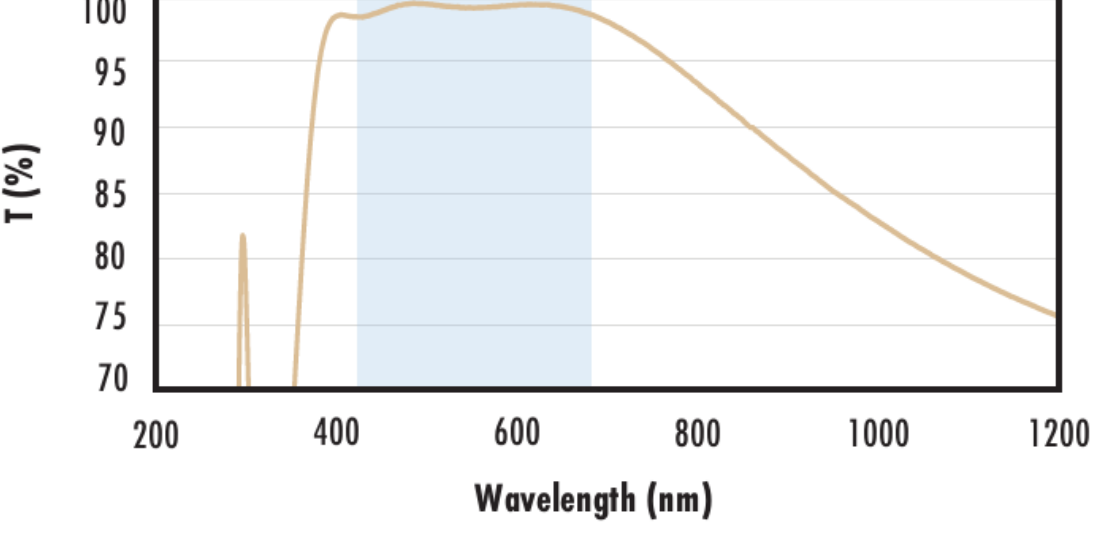
## Technische Informationen



UV FS Transmission Curve



| FUSED SILICA                                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Uncoated Fused Silica<br/>Typical Transmission</div><div></div></div>                     | <div><p>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</p><p><a href="#">Click Here to Download Data</a></p></div>                                                                                                                                                                                                                                                                                                                                                                           |
| <div><div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div><div></div></div> | <div><p>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.</p><p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p><p><math>R_{avg} \leq 1.75\% @ 400 - 700\text{nm}</math> (N-BK7)</p><p>Data outside this range is not guaranteed and is for reference only.</p><p><a href="#">Click Here to Download Data</a></p></div>                                                                                                 |
| <div><div>Fused Silica with UV-AR Coating<br/>Typical Transmission</div><div></div></div>           | <div><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><math>R_{abs} \leq 1.0\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.75\% @ 250 - 425\text{nm}</math><br/><math>R_{avg} \leq 0.5\% @ 370 - 420\text{nm}</math></p><p>Data outside this range is not guaranteed and is for reference only.</p><p><a href="#">Click Here to Download Data</a></p></div> |

|                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div>20040060080010001200</div> <div>Wavelength (nm)</div>                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| <div>Fused Silica with UV-VIS Coating</div> <div>Typical Transmission</div> <div></div>    | <p>Typical transmission of a 3mm thick fused silica window with UV-VIS (250-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 1.0\%</math> @ 350 - 450nm<br/><math>R_{avg} \leq 1.5\%</math> @ 250 - 700nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                   |
| <div>Fused Silica with VIS-EXT Coating</div> <div>Typical Transmission</div> <div></div> | <p>Typical transmission of a 3mm thick fused silica window with VIS-EXT (350-700nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.5\%</math> @ 350 - 700nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                    |
| <div>Fused Silica with VIS-NIR Coating</div> <div>Typical Transmission</div> <div></div> | <p>Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{abs} \leq 0.25\%</math> @ 880nm<br/><math>R_{avg} \leq 1.25\%</math> @ 400 - 870nm<br/><math>R_{avg} \leq 1.25\%</math> @ 890 - 1000nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p> |
| <div>Fused Silica with VIS 0° Coating</div> <div>Typical Transmission</div> <div></div>  | <p>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p> <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\%</math> @ 425 - 675nm</p> <p>Data outside this range is not guaranteed and is for reference only.</p> <p><a href="#">Click Here to Download Data</a></p>                                                                                                     |



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:

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

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

[Click Here to Download Data](#)



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:

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

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

[Click Here to Download Data](#)



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:

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

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

[Click Here to Download Data](#)

## Kundenspezifische Produkte

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.

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## Kompatible Halterungen