

TECHSPEC<sup>®</sup>

Doppelkonvexe Linse aus UV-Quarzglas, 6 mm D. x 6 mm eff. BW, NIR-I-beschichtet



UV Fused Silica Double-Convex (DCX) Lenses



Produkt **#22-156** **6 In Stock**

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-

1

+

€146<sup>00</sup>

+ WARENKORB

| Mengenrabatte |                                 |
|---------------|---------------------------------|
| Stk. 1-5      | €146,00 stückpreis              |
| Stk. 6-25     | €117,00 stückpreis              |
| Stk. 26-49    | €110,00 stückpreis              |
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Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

Downloadbereich

| Produktdetails     |      |
|--------------------|------|
| Double-Convex Lens | Typ: |
|                    |      |
|                    |      |

Physikalische und mechanische Eigenschaften

|                      |                             |
|----------------------|-----------------------------|
| 6.00 +0.0/-0.025     | Durchmesser (mm):           |
| <1                   | Zentrierung (Bogenminuten): |
| Protective as needed | Fase:                       |
| 4.10 ±0.05           | Mittendicke CT (mm):        |
| 1.97                 | Randdicke ET (mm):          |
| 5.4                  | Freie Apertur CA (mm):      |

Optische Eigenschaften

|                                             |                                                     |
|---------------------------------------------|-----------------------------------------------------|
| 4.38                                        | Hintere Brennweite BFL (mm):                        |
| 6.00                                        | Effektive Brennweite EFL (mm):                      |
| NIR I (600-1050nm)                          | Beschichtung:                                       |
| R <sub>avg</sub> ≤0.5% @ 600 - 1050nm       | Beschichtungsspezifikation:                         |
| <a href="#">Fused Silica</a> (Corning 7980) | Substrat: <input type="checkbox"/>                  |
| 40-20                                       | Oberflächenqualität:                                |
| 1.5λ                                        | Power (P-V) @ 632,8 nm:                             |
| λ/4                                         | Unregelmäßigkeit (P-V) @ 632,8 nm:                  |
| 4.76                                        | Radius R <sub>1</sub> =R <sub>2</sub> (mm):         |
| 1.00                                        | Blende:                                             |
| 587.6                                       | Designwellenlänge Brennweite (nm):                  |
| ±1                                          | Toleranz Brennweite (%):                            |
| 0.50                                        | Numerische Apertur NA:                              |
| 600 - 1050                                  | Wellenlängenbereich (nm):                           |
| 7 J/cm² @ 1064nm, 10ns                      | Zerstörschwelle, Referenz: <input type="checkbox"/> |

Konformität mit Standards

|                          |                         |
|--------------------------|-------------------------|
| <a href="#">Konform</a>  | RoHS 2015:              |
| <a href="#">Anzeigen</a> | Konformitätszertifikat: |
| <a href="#">Konform</a>  | Reach 235:              |

Produktdetails

• Ideal für die Bildgebung

• Minimieren Aberrationen wie sphärische Aberration oder Koma

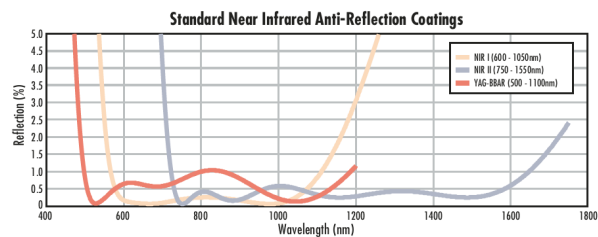
• Präzises Substrat aus Quarzglas

Die TECHSPEC® doppelkonvexen Linsen (DCX-Linsen) aus UV-Quarzglas, auch bikonvexe Linsen genannt, haben zwei positive, symmetrische Oberflächen mit gleichem Krümmungsradius auf beiden Seiten. Die Linsen werden generell für Bildgebungen mit endlichem Abstand und Konjugiertenverhältnis (Verhältnis zwischen Objekt- und Bildweite) zwischen 0,2 und 5 empfohlen. Bei einem Konjugiertenverhältnis von 1 sind Aberrationen wie sphärische Aberration, chromatische Aberration, Koma und Verzeichnung aufgrund des symmetrischen Linsendesigns minimiert oder sogar ganz eliminiert.

Technische Informationen



UV FS Transmission Curve



| FUSED SILICA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |                    |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-----|----|-----|----|-----|----|-----|----|------|----|------|----|------|----|------|----|------|----|------|----|------|----|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <div><div>Uncoated Fused Silica<br/>Typical Transmission</div><div><table border="1"><caption>Approximate data for Uncoated Fused Silica Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>92</td></tr><tr><td>400</td><td>94</td></tr><tr><td>600</td><td>94</td></tr><tr><td>800</td><td>94</td></tr><tr><td>1000</td><td>94</td></tr><tr><td>1200</td><td>94</td></tr><tr><td>1400</td><td>92</td></tr><tr><td>1600</td><td>94</td></tr><tr><td>1800</td><td>94</td></tr><tr><td>2000</td><td>94</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table></div></div>                                         | Wavelength (nm)    | Transmission T (%) | 200 | 92 | 400 | 94 | 600 | 94 | 800 | 94 | 1000 | 94 | 1200 | 94 | 1400 | 92 | 1600 | 94 | 1800 | 94 | 2000 | 94 | 2200 | 90 | <div>Typical transmission of a 3mm thick, uncoated fused silica window across the UV - NIR spectra.</div> <div><a href="#">Click Here to Download Data</a></div>                                                                                                                                                                                                                                                                                                   |
| Wavelength (nm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Transmission T (%) |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 92                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 92                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <div><div>Fused Silica with MgF<sub>2</sub> Coating<br/>Typical Transmission</div><div><table border="1"><caption>Approximate data for Fused Silica with MgF<sub>2</sub> Coating Transmission</caption><thead><tr><th>Wavelength (nm)</th><th>Transmission T (%)</th></tr></thead><tbody><tr><td>200</td><td>94</td></tr><tr><td>400</td><td>97</td></tr><tr><td>600</td><td>97</td></tr><tr><td>800</td><td>96</td></tr><tr><td>1000</td><td>96</td></tr><tr><td>1200</td><td>96</td></tr><tr><td>1400</td><td>93</td></tr><tr><td>1600</td><td>95</td></tr><tr><td>1800</td><td>95</td></tr><tr><td>2000</td><td>95</td></tr><tr><td>2200</td><td>90</td></tr></tbody></table></div></div> | Wavelength (nm)    | Transmission T (%) | 200 | 94 | 400 | 97 | 600 | 97 | 800 | 96 | 1000 | 96 | 1200 | 96 | 1400 | 93 | 1600 | 95 | 1800 | 95 | 2000 | 95 | 2200 | 90 | <div>Typical transmission of a 3mm thick fused silica window with MgF<sub>2</sub> (400-700nm) coating at 0° AOI.</div> <div>The blue shaded region indicates the coating design wavelength range, with the following specification:</div> <div><math>R_{avg} \leq 1.75\% \text{ @ } 400 - 700\text{nm (N-BK7)}</math></div> <div>Data outside this range is not guaranteed and is for reference only.</div> <div><a href="#">Click Here to Download Data</a></div> |
| Wavelength (nm)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Transmission T (%) |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 94                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 97                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 97                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | 96                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 96                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 96                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1400                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 93                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1600                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 95                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1800                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 95                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2000                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 95                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2200                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | 90                 |                    |     |    |     |    |     |    |     |    |      |    |      |    |      |    |      |    |      |    |      |    |      |    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <div><div>Fused Silica with UV-AR Coating<br/>Typical Transmission</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> |
| <p><b>Fused Silica with UV-VIS Coating</b><br/><b>Typical Transmission</b></p>    | <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\% @ 350 - 450\text{nm}</math><br/><math>R_{avg} \leq 1.5\% @ 250 - 700\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>                                                          |
| <p><b>Fused Silica with VIS-EXT Coating</b><br/><b>Typical Transmission</b></p>  | <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\% @ 350 - 700\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>                                                                                                                  |
| <p><b>Fused Silica with VIS-NIR Coating</b><br/><b>Typical Transmission</b></p>  | <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\% @ 880\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 400 - 870\text{nm}</math><br/><math>R_{avg} \leq 1.25\% @ 890 - 1000\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> |
| <p><b>Fused Silica with VIS 0° Coating</b><br/><b>Typical Transmission</b></p>   | <p>Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.</p>                                                                                                                                                                                                                                                                                                                                                                                                                             |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                     | <p>The blue shaded region indicates the coating design wavelength range, with the following specification:</p> <p><math>R_{avg} \leq 0.4\% @ 425 - 675\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>                                                                                                                                                                                                                                  |
| <p><b>Fused Silica with YAG-BBAR Coating</b><br/><b>Typical Transmission</b></p>  | <p>Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) 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\% @ 532\text{nm}</math><br/><math>R_{abs} \leq 0.25\% @ 1064\text{nm}</math><br/><math>R_{avg} \leq 1.0\% @ 500 - 1100\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>           |
| <p><b>Fused Silica with NIR I Coating</b><br/><b>Typical Transmission</b></p>    | <p>Typical transmission of a 3mm thick fused silica window with NIR I (600 - 1050nm) 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\% @ 600 - 1050\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>                                                                                                                     |
| <p><b>Fused Silica with NIR II Coating</b><br/><b>Typical Transmission</b></p>   | <p>Typical transmission of a 3mm thick fused silica window with NIR II (750 - 1550nm) 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 1.5\% @ 750 - 800\text{nm}</math><br/><math>R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}</math><br/><math>R_{avg} \leq 0.7\% @ 750 - 1550\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> |

## 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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- Enge Toleranzen und komplexe Formen
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