

TECHSPEC[®]

Doppelkonvexe Linse aus UV-Quarzglas, 18 mm D. x 20 mm eff. BW, NIR-II-beschichtet



UV Fused Silica Double-Convex (DCX) Lenses



Produkt **#22-188** **5 In Stock**

[Andere Beschichtungen](#)

-

1

+

€160⁰⁰

+ WARENKORB

Mengenrabatte	
Stk. 1-5	€160,00 stückpreis
Stk. 6-25	€128,00 stückpreis
Stk. 26-49	€120,00 stückpreis
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Preise exklusiv der geltenden Mehrwertsteuer und Abgaben

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Produktdetails	
Double-Convex Lens	Typ:

Physikalische und mechanische Eigenschaften	
Durchmesser (mm):	18.00 +0.0/-0.025
Zentrierung (Bogenminuten):	<1
Fase:	Protective as needed
Mittendicke CT (mm):	7.64 ±0.10
Randdicke ET (mm):	2.50
Freie Apertur CA (mm):	17.00
Optische Eigenschaften	
Hintere Brennweite BFL (mm):	17.18
Effektive Brennweite EFL (mm):	20.00
Beschichtung:	NIR II (750-1550nm)
Beschichtungsspezifikation:	R _{abs} ≤1.5% @ 750 - 800nm R _{abs} ≤1.0% @ 800 - 1550nm R _{avg} ≤0.7% @ 750 - 1550nm
Substrat: ☐	Fused Silica (Corning 7980)
Oberflächenqualität:	40-20
Power (P-V) @ 632,8 nm:	1.5λ
Unregelmäßigkeit (P-V) @ 632,8 nm:	λ/4
Radius R ₁ =R ₂ (mm):	17.05
Blende:	1.11
Designwellenlänge Brennweite (nm):	587.6
Toleranz Brennweite (%):	±1
Numerische Apertur NA:	0.45
Wellenlängenbereich (nm):	750 - 1550
Zerstörschwelle, Referenz: ☐	8 J/cm² @ 1064nm, 10ns
Konformität mit Standards	
RoHS 2015:	Konform
Konformitätszertifikat:	Anzeigen
Reach 235:	Konform

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

- Ideal für die Bildgebung
- Minimieren Aberrationen wie sphärische Aberration oder Koma
- Präzises Substrat aus Quarzglas

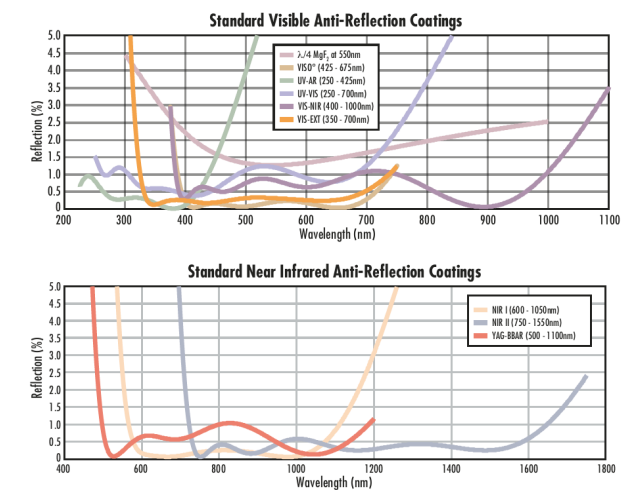
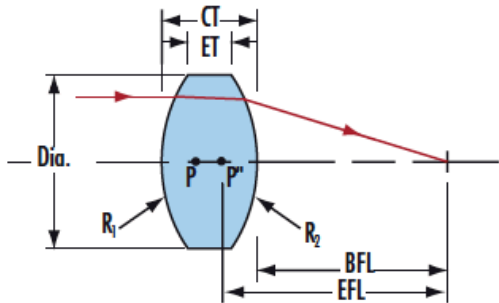
Die TECHSPEC® doppelkonvexen Linsen (DCX-Linsen) aus UV-Quarzglas, auch bikonvexe Linsen genannt, haben zwei positive, symmetrische Oberflächen mit gleichem Krümmungsradius auf beiden Seiten. Die Linsen werden

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

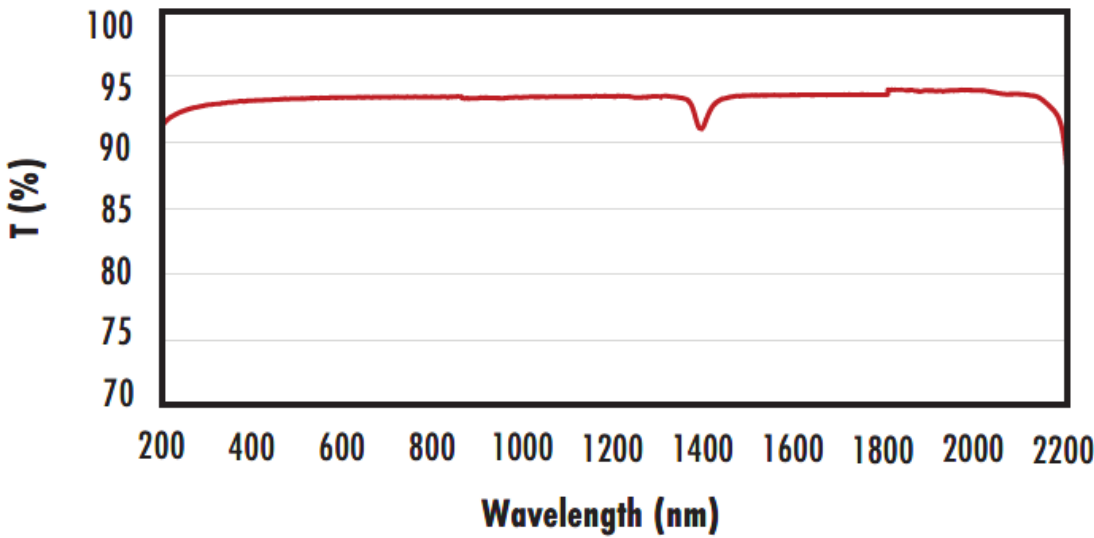


UV FS Transmission Curve



FUSED SILICA

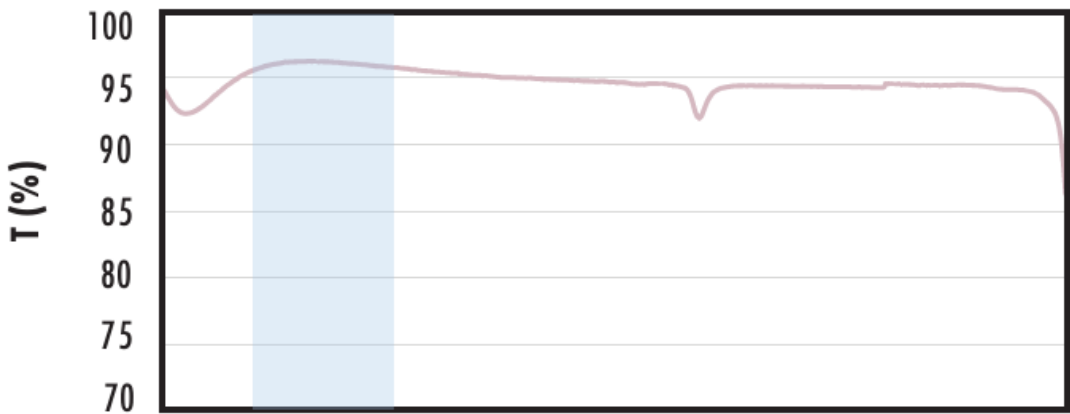
Uncoated Fused Silica Typical Transmission



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.

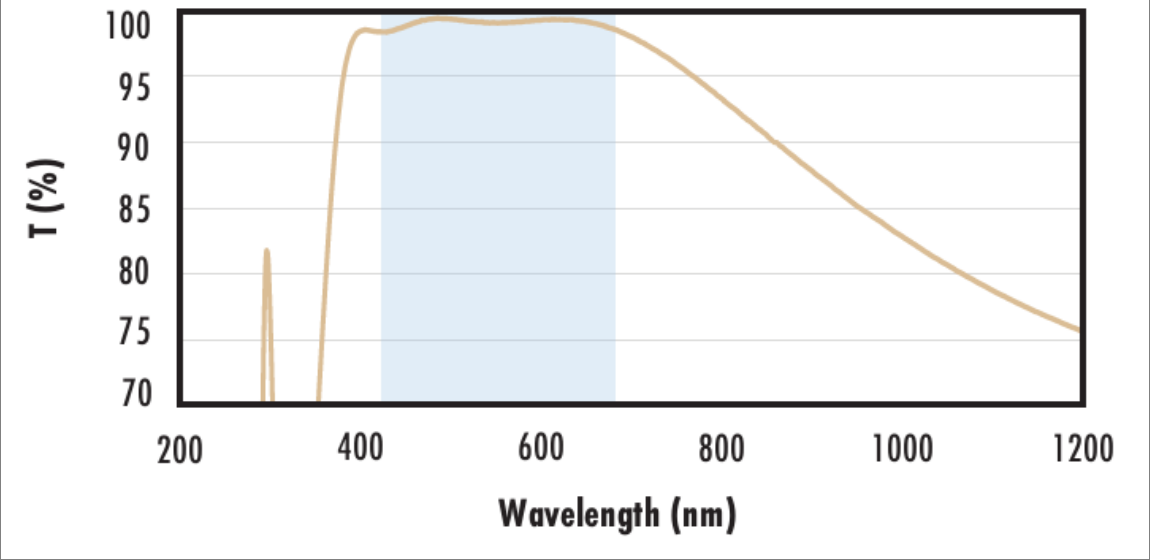
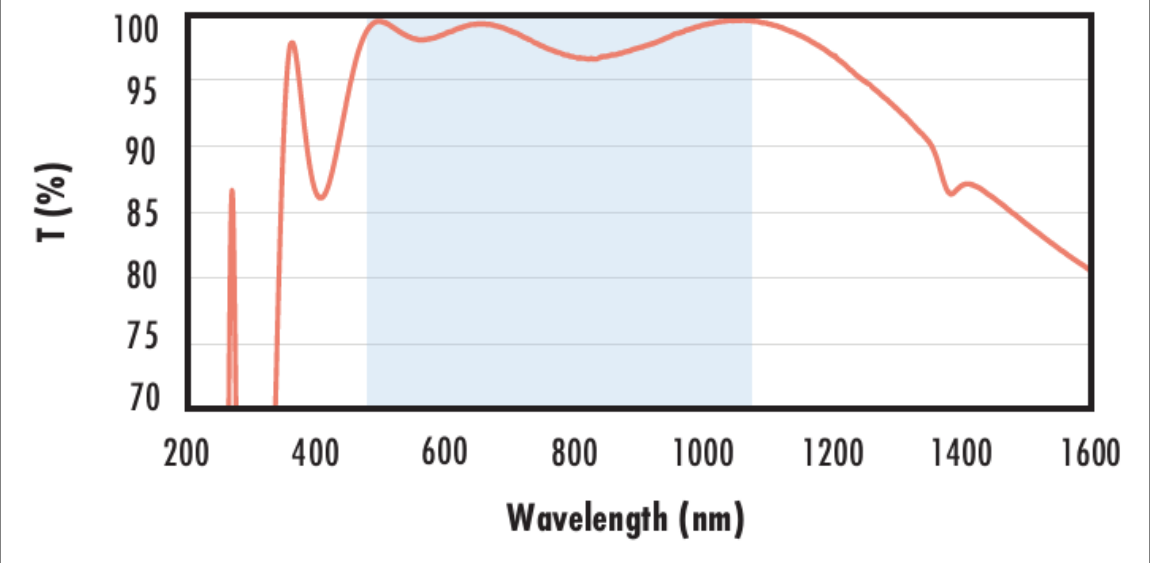
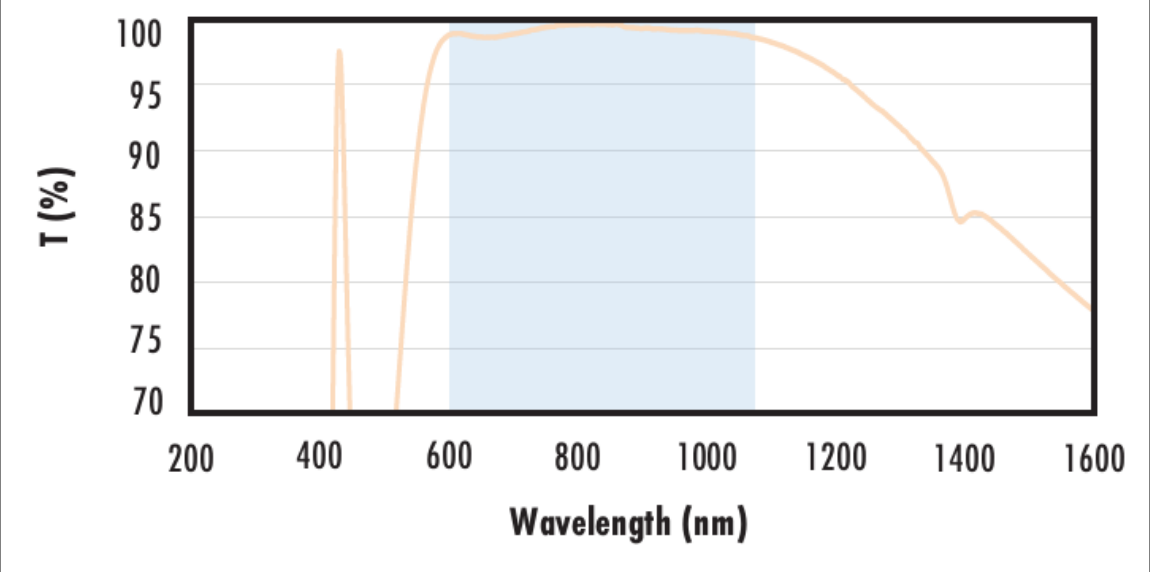
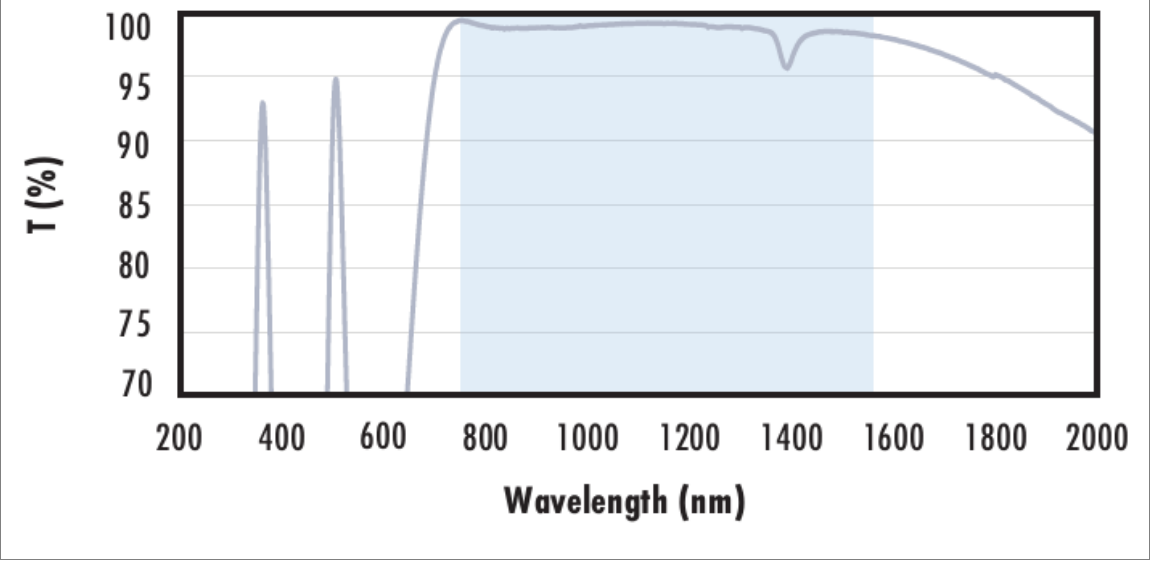
The blue shaded region indicates the coating design wavelength range, with the following specification:

$R_{avg} \leq 1.75\%$ @ 400 - 700nm (N-BK7)

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

[Click Here to Download Data](#)

2004006008001000120014001600180020002200 Wavelength (nm)	
Fused Silica with UV-AR Coating Typical Transmission T (%) 100 95 90 85 80 75 70 200 400 600 800 1000 1200 Wavelength (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 - 425nm $R_{avg} \leq 0.75\%$ @ 250 - 425nm $R_{avg} \leq 0.5\%$ @ 370 - 420nm 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 T (%) 100 95 90 85 80 75 70 200 400 600 800 1000 1200 Wavelength (nm)	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: $R_{abs} \leq 1.0\%$ @ 350 - 450nm $R_{avg} \leq 1.5\%$ @ 250 - 700nm 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 T (%) 100 95 90 85 80 75 70 200 400 600 800 1000 1200 Wavelength (nm)	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: $R_{avg} \leq 0.5\%$ @ 350 - 700nm 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 T (%) 100 95 90 85 80 75 70 200 400 600 800 1000 1200 1400 1600 Wavelength (nm)	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: $R_{abs} \leq 0.25\%$ @ 880nm $R_{avg} \leq 1.25\%$ @ 400 - 870nm $R_{avg} \leq 1.25\%$ @ 890 - 1000nm 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: $R_{avg} \leq 0.4\% @ 425 - 675\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data
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: $R_{abs} \leq 0.25\% @ 532\text{nm}$ $R_{abs} \leq 0.25\% @ 1064\text{nm}$ $R_{avg} \leq 1.0\% @ 500 - 1100\text{nm}$ 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: $R_{avg} \leq 0.5\% @ 600 - 1050\text{nm}$ 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: $R_{abs} \leq 1.5\% @ 750 - 800\text{nm}$ $R_{abs} \leq 1.0\% @ 800 - 1550\text{nm}$ $R_{avg} \leq 0.7\% @ 750 - 1550\text{nm}$ Data outside this range is not guaranteed and is for reference only. Click Here to Download Data

