

TECHSPEC[®] 12mm Dia. x 30mm FL, NIR I Coated, Plano-Convex Lens



UV Fused Silica Plano-Convex (PCX) Lenses



Stock **#18-045** 6 In Stock

-

1

+

₹10,977

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Volume Pricing	
Qty 1-5	₹10,977 each
Qty 6-25	₹8,797 each
Qty 26-49	₹8,252 each
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General

Type:

Plano-Convex Lens

Physical & Mechanical Properties

Diameter (mm):

12.00 -0.025

<1	Centering (arcmin):
3.55 ±0.05	Center Thickness CT (mm):
2.17	Edge Thickness ET (mm):
11	Clear Aperture CA (mm):
Protective as needed	Bevel:

Optical Properties	
30.00 @ 587.6nm	Effective Focal Length EFL (mm):
27.56	Back Focal Length BFL (mm):
NIR I (600-1050nm)	Coating:
R _{avg} ≤0.5% @ 600 - 1050nm	Coating Specification:
Fused Silica (Corning 7980)	Substrate: □
40-20	Surface Quality:
3 Rings	Power (P-V) @ 632.8nm:
0.5 Rings	Irregularity (P-V) @ 632.8nm:
±1	Focal Length Tolerance (%):
13.75	Radius R ₁ (mm):
2.5	f/#:
0.20	Numerical Aperture NA:
600 - 1050	Wavelength Range (nm):
7 J/cm ² @ 1064nm, 10ns	Damage Threshold, Reference: □

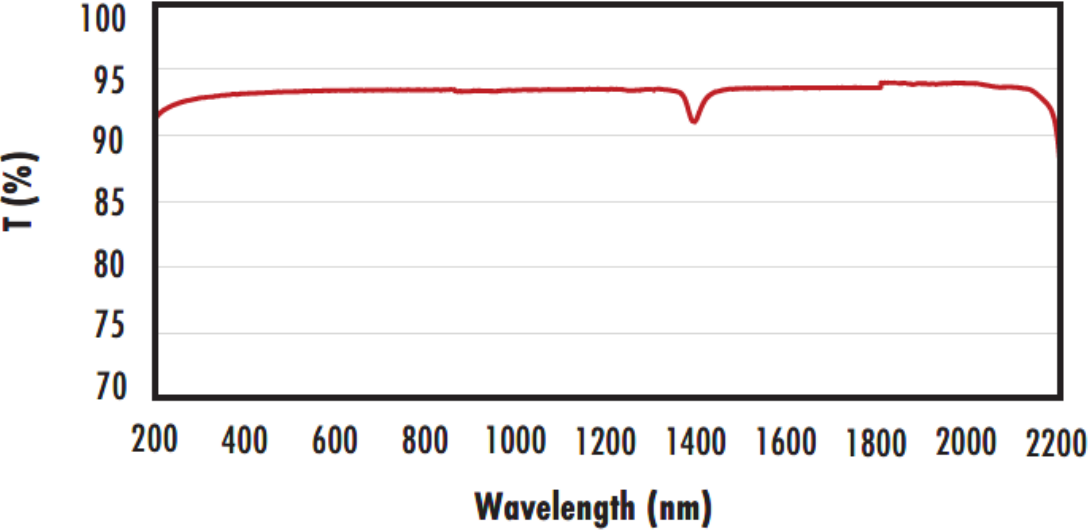
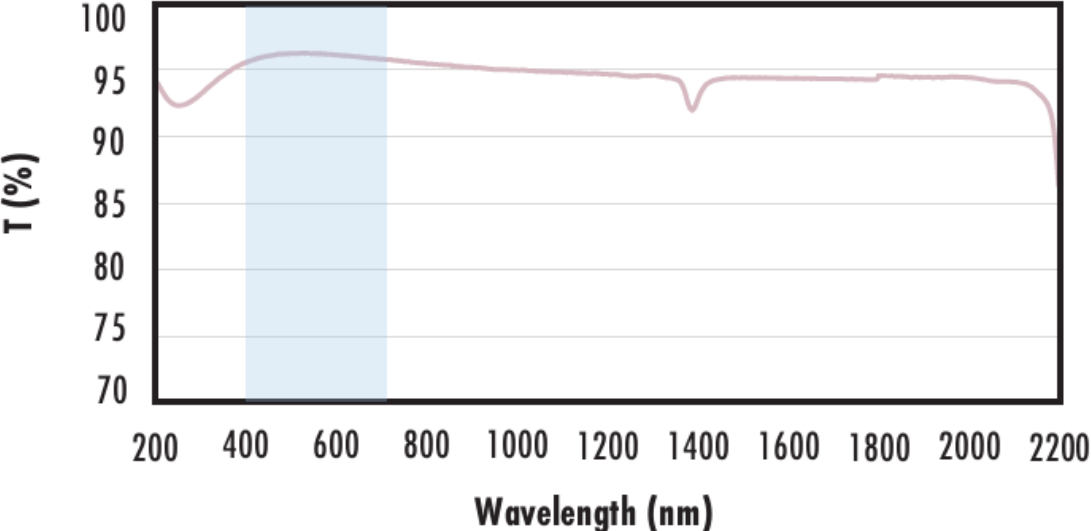
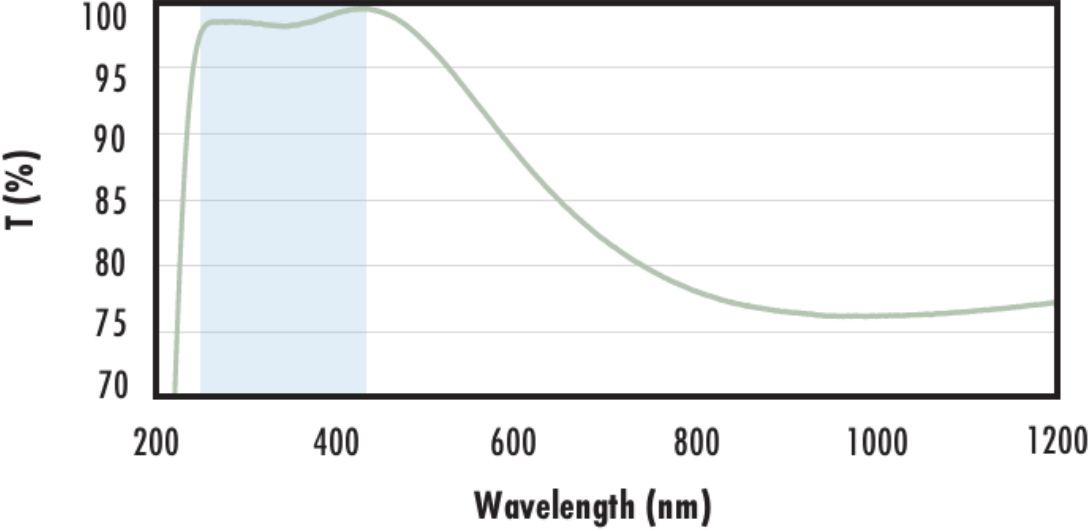
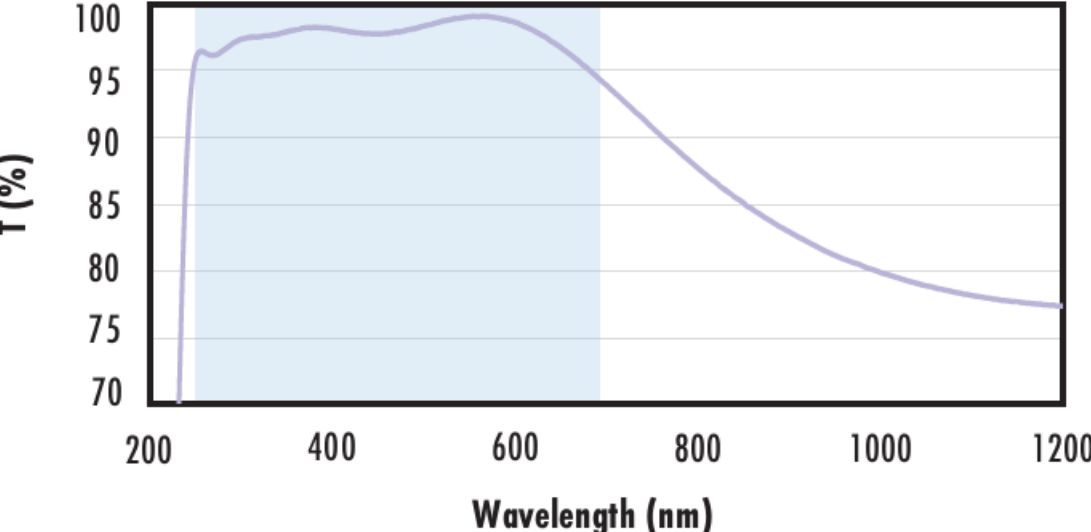
Regulatory Compliance	
Compliant	RoHS 2015:
View	Certificate of Conformance:
Compliant	Reach 235:
Japan	Country of Origin:
Edmund Optics India Private Limited	Imported By:

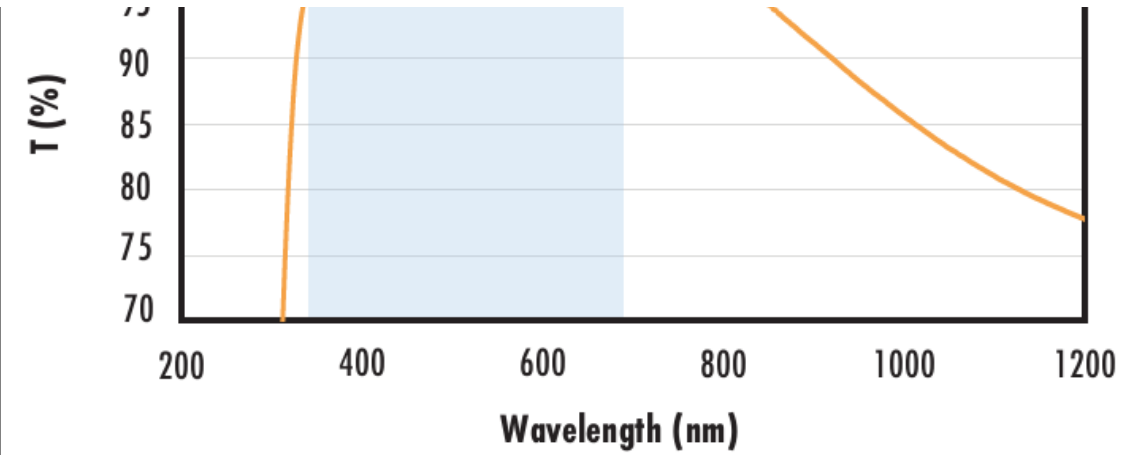
Product Details

- AR Coated to Provide <0.5% Reflection per Surface for 600 - 1050nm
 - Precision Fused Silica Substrate
 - Various Coating Options: [Uncoated](#), [MgF₂](#), [UV-AR](#), [UV-VIS](#), [VIS-EXT](#), [VIS-NIR](#), [VIS 0°](#), [YAG-BBAR](#), and [NIR II](#)
- TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses NIR I Coated feature precision specifications and a [variety of coating options](#) on a broadband substrate. Fused Silica is commonly used in applications from the Ultraviolet (UV) through the Near-Infrared (NIR). Its low index of refraction, low coefficient of thermal expansion, and low inclusion content make it ideal for laser applications and harsh environmental conditions. TECHSPEC® UV Fused Silica Plano-Convex (PCX) Lenses NIR I Coated feature industry leading diameter and centration specifications, making them ideal for integration into demanding imaging and targeting applications. These lenses are NIR I coated to increase their coating performance in the 600nm to 1050nm range.

Technical Information

FUSED SILICA	
Uncoated Fused Silica Typical Transmission	

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: $R_{abs} \leq 1.0\% @ 350 - 450\text{nm}$ $R_{avg} \leq 1.5\% @ 250 - 700\text{nm}$ 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



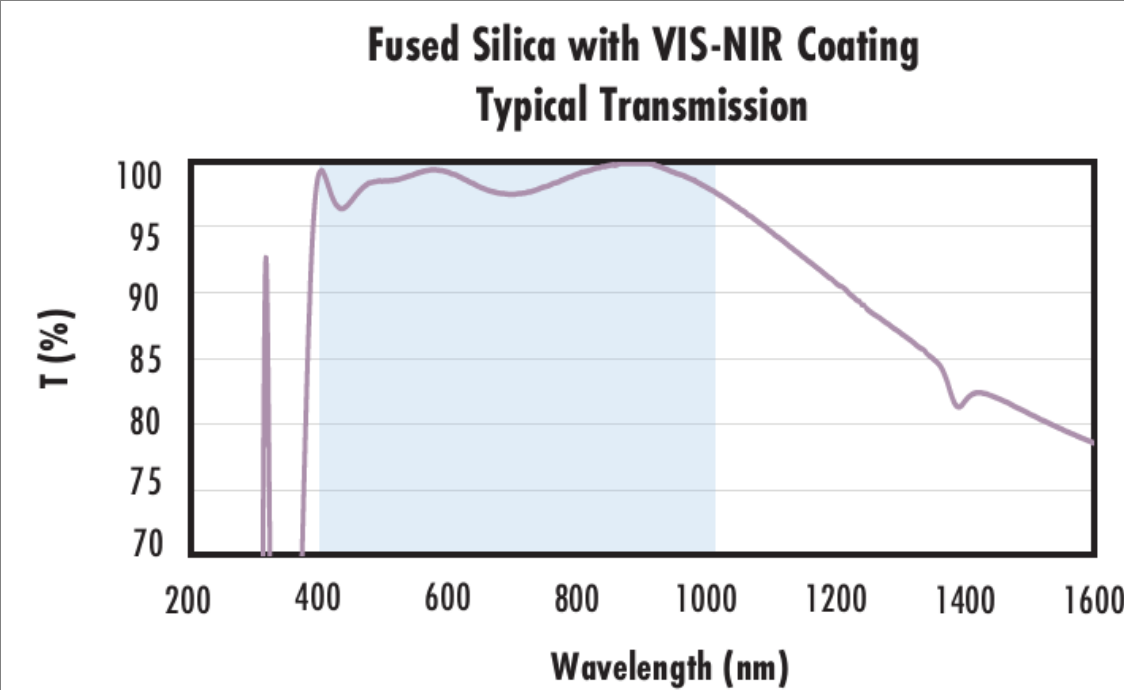
VIS-EXT (350-700nm) coating at 0° AOI.

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

$R_{avg} \leq 0.5\% @ 350 - 700\text{nm}$

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

[Click Here to Download Data](#)



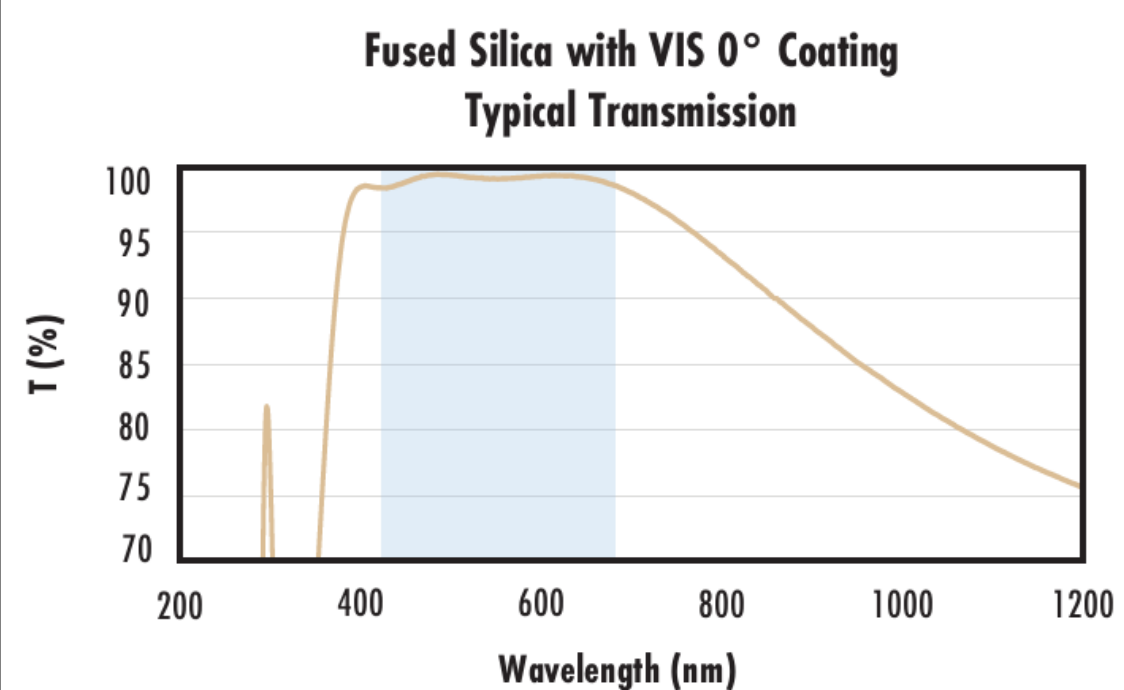
Typical transmission of a 3mm thick fused silica window with VIS-NIR (400-1000nm) coating at 0° AOI.

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

$R_{abs} \leq 0.25\% @ 880\text{nm}$
 $R_{avg} \leq 1.25\% @ 400 - 870\text{nm}$
 $R_{avg} \leq 1.25\% @ 890 - 1000\text{nm}$

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

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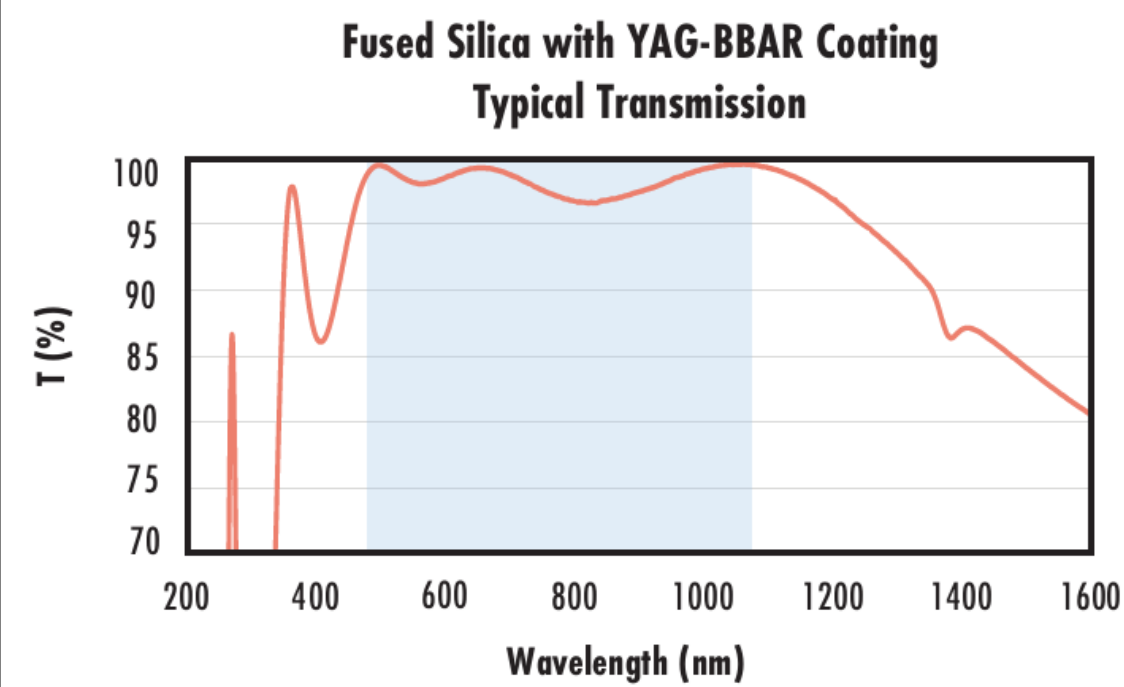
Typical transmission of a 3mm thick fused silica window with VIS 0° (425-675nm) coating at 0° AOI.

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.

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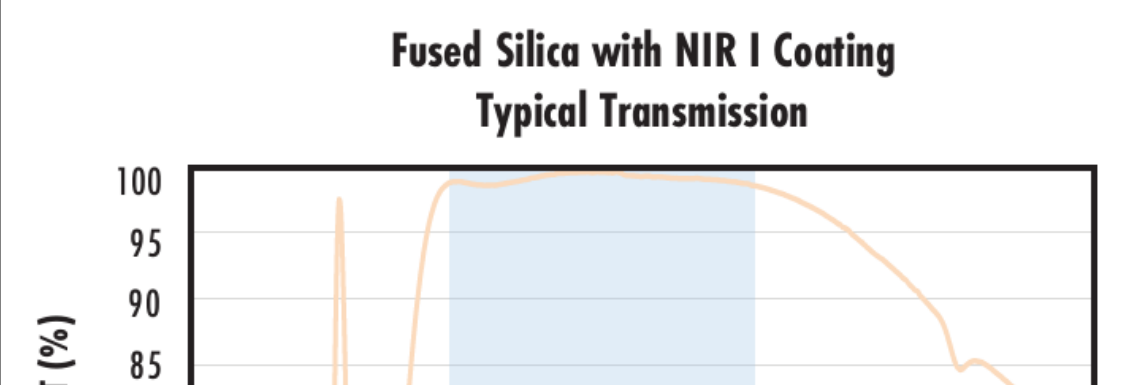
Typical transmission of a 3mm thick fused silica window with YAG-BBAR (500-1100nm) coating at 0° AOI.

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](#)



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:

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



Custom

Edmund Optics offers comprehensive custom manufacturing services for optical and imaging components tailored to your specific application requirements. Whether in the prototyping phase or preparing for full-scale production, we provide flexible solutions to meet your needs. Our experienced engineers are here to assist—from concept to completion.

Our capabilities include:

- Custom dimensions, materials, coatings, and more
- High-precision surface quality and flatness
- Tight tolerances and complex geometries
- Scalable production—from prototype to volume

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