

TOQUARTZ®

Tech Specifications

Flanged Quartz Glass Tubes Product Catalog

Integrated Engineering & Agile Production

for Demanded Specifications

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TOQUARTZ® FLANGED QUARTZ GLASS TUBES

TOQUARTZ® is a specialized manufacturer of high-purity quartz products based in China, serving global B2B clients in laboratory instrumentation, biomedical research, and environmental monitoring. With in-house engineering support and flexible production capabilities, we offer both standard and custom TOQUARTZ® Flanged Quartz Glass Tubes with fast delivery and consistent quality.



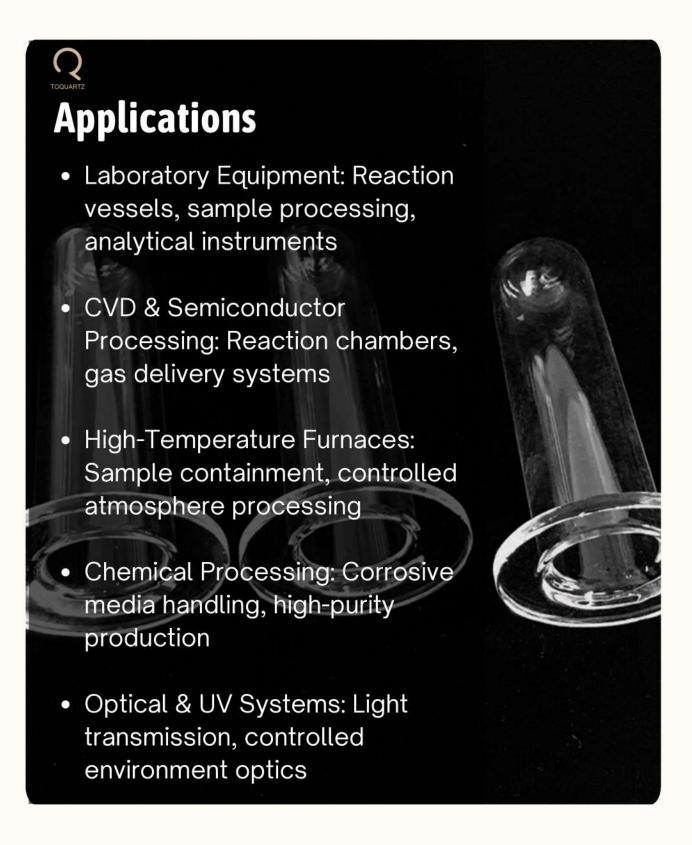
TOQUARTZ® FLANGED QUARTZ GLASS TUBES



Key Features

- Exceptional Heat Resistance: Continuous operation up to 1200°C, short-term exposure to 1450°C
- Superior Chemical Resistance: Inert to most chemicals except hydrofluoric acid
- Excellent Thermal Stability: Extremely low thermal expansion coefficient $(5.5 \times 10^{-7})^{\circ}$ C)
- Superior Optical Transparency: >93% visible light transmission, >80% UV transmission
- Excellent Electrical Insulation: 10,000x greater resistance than ordinary glass
- Precision Flange Design: Engineered for optimal sealing and secure connections

TOQUARTZ® FLANGED QUARTZ GLASS TUBES





TECHNICAL SPECIFICATIONS

Physical Properties

- Material: High-purity fused quartz (≥99.99% SiO₂)
- Density: 2.2 g/cm³
- Tensile Strength: ≥ 50 MPa
- Flexural Strength: Up to 350 MPa
- Thermal Expansion Coefficient: 5.5 × 10⁻⁷ /°C
- Thermal Conductivity: 1.3-1.4 W/(m·K)

Thermal Properties

- Maximum Operating Temperature (Continuous): 1200°C
- Maximum Operating Temperature (Short-term): 1450°C
- Softening Point: 1730°C
- Thermal Shock Resistance: Excellent

Optical Properties

- Visible Light Transmittance: ≥ 93%
- UV Transmittance (254 nm): ≥ 80%
- Refractive Index (589.3 nm): 1.4585

Electrical Properties

- Volume Resistivity (20°C): ≥ 10¹⁸ Ω·cm
- Dielectric Strength: 25-40 kV/mm



CUSTOM DIMENSIONS

Common Customization Options:

- Tube outer diameter: 5mm 300mm
- Tube inner diameter: 3mm 295mm
- Wall thickness: 1mm 5mm
- Flange outer diameter: 1.5x 3x tube diameter
- Flange thickness: 2mm 10mm
- Total length: 50mm 2000mm
- Surface finish: Fire-polished, ground, or custom



ABOUTTOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factorydirect approach eliminates intermediaries, providing cost-effective solutions with responsive technical support. We welcome small batch orders and offer 24-hour shipping for standard items.

Contact Information

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TOQUARTZ® - Precision Quartz Solutions for Industry and Research

For technical specifications, custom requirements, or pricing information, please contact our sales team.