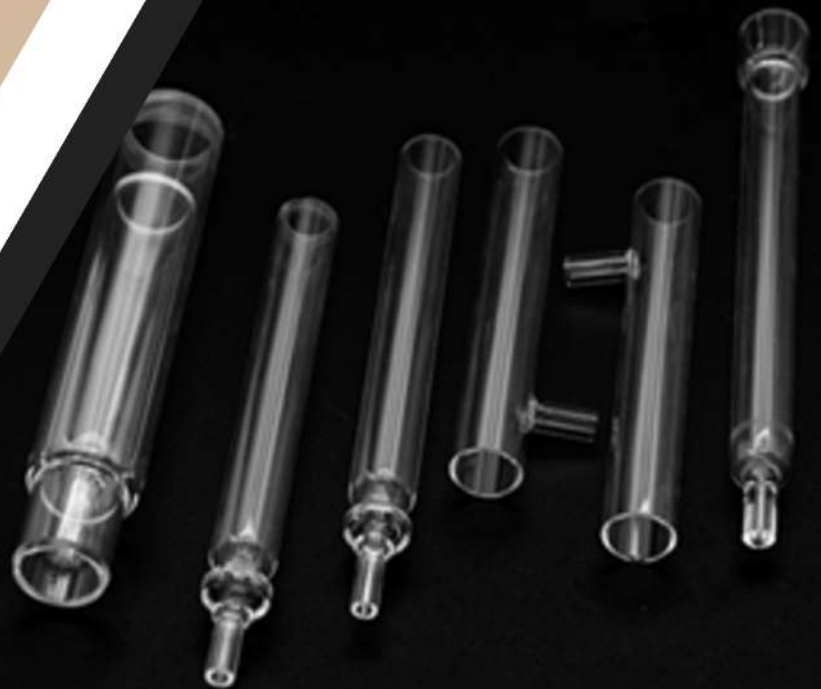




TOQUARTZ®
Tech Specifications

Quartz Glass Reduction Tube Product Catalog

Integrated Engineering & Agile Production
for Demanded Specifications



TOQUARTZ® QUARTZ GLASS REDUCTION TUBE

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® Quartz Glass Reduction Tube with fast delivery and consistent quality.



TOQUARTZ

Product Overview

TOQUARTZ® High-purity quartz reducer tubes designed to connect different diameter quartz tubes with precision. Manufactured from 99.995% SiO₂ with excellent thermal stability up to 1200°C and superior chemical resistance. Ideal for laboratory vacuum systems, gas delivery lines, optical applications, and high-temperature industrial environments.

TOQUARTZ® QUARTZ GLASS REDUCTION TUBE



Key Features

- **High Purity:** 99.995% SiO₂ content for minimal contamination
- **Thermal Stability:** Withstands continuous operation up to 1200°C
- **Precision Manufacturing:** Dimensional tolerance of ±0.1mm standard
- **Chemical Resistance:** Resistant to most acids, bases, and corrosive chemicals
- **Customizable:** Available in standard sizes or custom configurations
- **Optical Clarity:** Excellent transmission from UV to IR spectrum

TOQUARTZ® QUARTZ GLASS REDUCTION TUBE



Applications

- **Laboratory Equipment:** Vacuum systems, gas handling, analytical instrumentation
- **Optical Systems:** Fiber optic preform manufacturing, laser applications
- **Industrial Processes:** High-temperature gas transport, thermal processing
- **Research Facilities:** Custom experimental setups, specialized equipment



TECHNICAL SPECIFICATIONS

Physical Properties

- **Material:** High-purity fused quartz (99.995% SiO₂)
- **Maximum Operating Temperature:** 1200°C continuous
- **Thermal Expansion Coefficient:** $5.5 \times 10^{-7} / ^\circ\text{C}$ (20-1000°C)
- **Density:** 2.2 g/cm³
- **Mechanical Strength:** Tensile strength 50 MPa

Chemical Properties

- **Chemical Resistance:** Resistant to most acids, bases, and corrosive chemicals
- **Exceptions:** Hydrofluoric acid (HF), concentrated phosphoric acid at high temperatures
- **Water Absorption:** Effectively zero
- **Gas Permeability:** Impermeable to gases except helium at high temperatures

Optical Properties

- **UV Transmission:** >90% at 200nm and above
- **Visible Light Transmission:** >93%
- **IR Transmission:** Excellent up to 3.5µm
- **Refractive Index:** 1.4585 at 587.6nm (20°C)



CUSTOMIZATION OPTIONS

- **Geometry:** Multi-diameter transitions, custom angles, specialized shapes
- **Surface Finishes:** Fire-polished, ground, custom end treatments
- **Connections:** Ground glass joints, flanges, specialized fittings
- **Engineering Support:** Technical consultation, CAD design assistance



ABOUT TOQUARTZ®

TOQUARTZ® is a specialized manufacturer of high-quality quartz glass products for industrial, laboratory, and optical applications. Our factory-direct 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

Email: info@toquartz.com

Website: www.toquartz.com

TOQUARTZ® - Precision Quartz Solutions for Industry and Research

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