



TOQUARTZ

Product Catalog

TOQUARTZ®

Clear Wall Quartz Flow Cell with M6 Threaded Connectors

Integrated Engineering & Agile Production
for Demanded Specifications





TOQUARTZ® CLEAR WALL QUARTZ FLOW CELL WITH M6 THREADED CONNECTORS

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® Clear Wall Quartz Flow Cell with M6 Threaded Connectors with fast delivery and consistent quality.



Product Overview

The TOQUARTZ® Clear Wall Quartz Flow Cell with M6 Threaded Connectors is engineered for laboratory and industrial flow analysis. It features a transparent quartz body for full UV-visible transmission (120–4500 nm), a standard 10 mm optical path, and secure threaded inlets/outlets that prevent leakage under continuous operation. With material purity above 99.98% SiO₂, thermal stability beyond 1100 °C, and resistance to acids and bases, this flow cell is suitable for demanding analytical environments.



TOQUARTZ® CLEAR WALL QUARTZ FLOW CELL WITH M6 THREADED CONNECTORS



Key Features

- Optical Transmission: Clear quartz walls maintain >90% transmission in the UV–Vis range (120–4500 nm).
- Dimensional Accuracy: Path length tolerance controlled within ± 0.1 mm for reproducible results.
- Thermal Stability: Continuous use supported up to 1100 °C without distortion.
- Corrosion Resistance: Withstands acids, bases, and solvents without clouding or surface degradation.
- Secure Integration: Standard M6 threaded connectors ensure leak-free and stable system fit.



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Applications

- Chemical Reaction Kinetics Monitoring
- Food and Beverage Nutrient Analysis
- Petrochemical Effluent Treatment
- Environmental Water Quality Testing
- Bioprocess and Fermentation Control



TECHNICAL SPECIFICATIONS

Physical Properties

- Fracture modulus: ≥ 350 MPa
- Density: 2.2 g/cm^3
- Thermal conductivity: $120\text{--}160 \text{ W/m}\cdot\text{K}$
- Softening point: $\sim 1665^\circ\text{C}$
- Path length tolerance: $\pm 0.1 \text{ mm}$

Chemical Properties

- SiO_2 purity: $\geq 99.98\%$ (up to 99.995%)
- Alkali solubility: $\leq 50 \mu\text{g/g}$
- Acid/base resistance: stable in HCl, NaOH solutions
- Fluoride resistance: stable in HF-free environments
- Low alkali ion content

Optical Properties

- Transmission range: $120\text{--}4500 \text{ nm}$
- UV cut-off: $\sim 160 \text{ nm}$
- No absorption peaks in measurement range
- Refractive index: $1.46 @ 589 \text{ nm}$
- Homogeneity: $\Delta n < 2 \times 10^{-6}$

Thermal Properties

- Service temperature: up to 1100°C
- Expansion coefficient: $\leq 0.55 \times 10^{-6}/\text{K}$ ($20\text{--}1000^\circ\text{C}$)
- Thermal shock resistance: high
- Annealing point: 1215°C
- Strain point: 1120°C



SIZE CHART

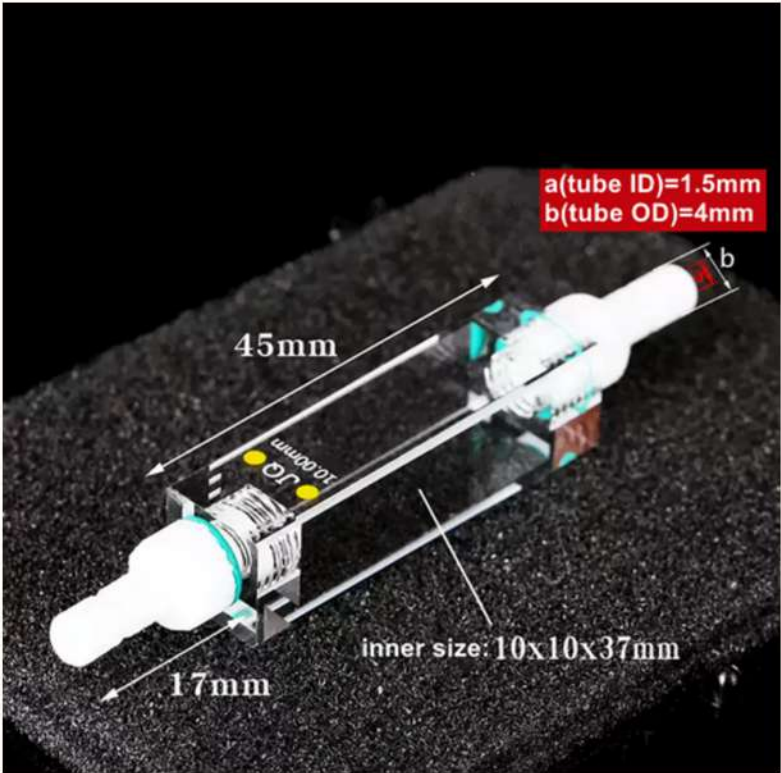


3500µl Transparent Quartz Flow Through Cuvette with M6 Threaded Connectors

Model	Description	Path Length	Volume	Outline Dimension
AT-BSM-8007	3500µl Transparent Quartz Flow Through Cuvette with M6 Threaded Connectors	10mm	3500µl	12.5x12.5x45 mm



SIZE CHART



3500µl Clear Wall Quartz Flow Cell with M6 Threaded Connectors

Model	Description	Path Length	Volume	Outline Dimension
AT-BSM-8013	3500µl Clear Wall Quartz Flow Cell with M6 Threaded Connectors	10mm	3500µl	12.5x12.5x45 mm



SIZE CHART



27000 Clear Wall Quartz Flow Cell with M6 Threaded Connectors

Model	Description	Path Length	Volume	Outline Dimension
AT-BSM-8016	27000 Clear Wall Quartz Flow Cell with M6 Threaded Connectors	10mm	27000μl	51.5x14x60mm



CUSTOM ENGINEERING SERVICES

Customization Services Our engineering team provides comprehensive customization options to meet your specific requirements:

Optical Path Customization

- Adjusted optical lengths improve measurement reproducibility.
- Optimized walls support consistent UV-Vis transmission.
- Stable design minimizes recalibration cycles.

Volume and Chamber Design

- Configured flow chamber shapes support stable liquid circulation.
- Optimized chamber capacity prevents overflow during sampling.
- Controlled design reduces dead volume in assays.

Connector and Interface Options

- M6 fittings provide leak-free sealing under pressurized flow.
- Connector choices align with international tubing standards.
- Durable seals reduce downtime from connector maintenance.

Custom Design Process

- Customers face challenges converting system needs into drawings.
- Path tolerance issues create calibration drift in instruments.
- Poorly matched connectors disrupt stability in live analysis.



QUALITY ASSURANCE

Each TOQUARTZ Quartz Cuvette undergoes rigorous quality control testing:

- **Dimensional Verification:** Precision measurement of all critical dimensions
- **Optical Transmission Testing:** Verification of spectral transmission properties
- **Surface Quality Inspection:** Microscopic examination of polished surfaces
- **Paired Performance Testing:** Validation of optical consistency

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.