

TOQUARTZ Product Catalog

TOQUARTZ® Black Wall Quartz FlowThrough Fluorescent Cuvette with Stainless Steel Connector

Integrated Engineering & Agile Production

for Demanded Specifications



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TOQUARTZ® BLACK WALL QUARTZ FLOW-THROUGH FLUORESCENT CUVETTE WITH STAINLESS STEEL CONNECTOR

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® Black-wall Quartz Flow Cell Cuvette with Stainless Steel Connectors with fast delivery and consistent quality.



Product Overview

TOQUARTZ® Black Wall Quartz Flow-Through Fluorescent Cuvette with Stainless Steel Connector is manufactured from high-purity fused quartz with black-coated exterior walls specifically designed to absorb stray light and reduce background fluorescence. This design makes it ideal for online fluorescence/UV-Vis detection and continuous flow analysis applications.

Standard Configuration: 10 mm optical path, 8.5 mm center height, with stainless steel tube connectors for seamless integration with laboratory fluid systems.

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Key Features

- Enhanced Signal-to-Noise Ratio: Black walls absorb stray light and reduce background fluorescence for improved detection limits
- Wide Spectral Range: Transmission from 190-2500 nm covering UV-Vis-NIR applications
- Reliable Connections: Precision stainless steel connectors compatible with standard 1/16" laboratory tubing
- Precision Manufacturing: Tight tolerances ensure consistent optical path length and reproducible results

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Applications

- Fluorescence Spectroscopy: Trace detection of biomolecules, environmental contaminants, and fluorescent probes
- HPLC Detection: Post-column derivative detection and online monitoring
- Process Monitoring: Continuous analysis of industrial processes and quality control
- Environmental Analysis: Water quality monitoring and pollution detection
- Life Science Research: Protein quantification, enzyme kinetics, and DNA analysis



TECHNICAL SPECIFICATIONS

Parameter	Specification
Material	High-purity fused quartz with black exterior walls
Optical Path Length	10 mm standard (customizable 2-20 mm)
Center Height	8.5 mm
Cavity Volume	16-800 μL (depending on path length)
Transmission Range	190-2500 nm (UV-Vis-NIR)
Connector Material	304/316L stainless steel (standard)
Tubing Compatibility	1/16" standard (other sizes available)
Operating Temperature	10-80°C recommended
Pressure Rating	≤0.2 MPa (29 psi)
Chemical Resistance	Resistant to most acids, bases, and organic solvents

SIZE CHART



 $32\mu l\,Black-wall\,quartz\,flow\,cell\,cuvette\,with\,stainless\,steel\,connectors$

Model	Description	PathLeng th	Volume	Outline Dimension
AT-BSM-8026	32µl Black-wall quartz flow cell cuvette with stainless steel connectors	10mm	32µl	12.5x12.5x35 mm

SIZE CHART



 $80\mu l\,Black-wall\,quartz\,flow\,cell\,cuvette\,with\,stainless\,steel\,connectors$

Model	Description	PathLeng th	Volume	Outline Dimension
AT-BSM-8026- 1	80µl Black-wall quartz flow cell cuvette with stainless steel connectors	10mm	80µl	12.5x12.5x35 mm

Q CUSTOM ENGINEERING SERVICES

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

- Custom Path Lengths: Available from 2 mm to 20 mm
- Cavity Volume: Tailored internal volumes from 16 μL to 800 μL
- Window Configuration: Two, three, or four-window designs
- Z-Dimension Height: Custom center heights
- Connector Materials: Various stainless steel grades and specialized alloys
- Connector Diameter: Custom tubing connections beyond standard 1/16"
- Surface Treatments: Electro-polished finish for ultraclean applications

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.