

Polymicro Technologies™ Tight-Tolerance VS Flexible Fused Silica Capillary Tubing



Delivering precise and consistent flow control of liquids and gases with industry-leading ID tolerances of $\pm 1\mu\text{m}$, Polymicro Technologies™ Tight-Tolerance Vision System (VS) Flexible Fused Silica Capillary Tubing improves fluidic control, drug dosage delivery precision and more

Features and Benefits

Interior diameter (ID) tolerances down to $\pm 1\mu\text{m}$

Provide unparalleled flow control, medicinal dosage precision, reproducible liquid/gas delivery rates and low variances of system dead-volumes

Industry-standard outer diameter dimensions

Interface easily with existing technology. Applicable for use in almost any industry or application

Protective polyimide outer coating

Resists chemical damage and abrasion for better protection during use and handling. Allows for mechanical flexibility. Operation up to $+350^{\circ}\text{C}$

Pure synthetic silica capillary

Can be cut or cleaved to any desired length for specific applications, requirements and solutions. High purity provides inert inner surfaces

Custom options available

Boosts design efficiency



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Applications

Medical

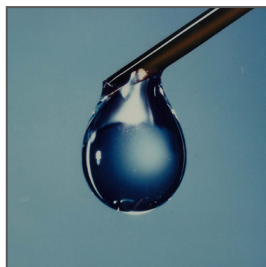
- Precision Drug Delivery
- Flow Control Systems
- Clinical/ Diagnostics Devices

Scientific

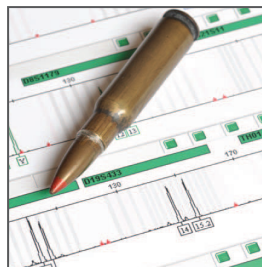
- Nanoflow Liquid Chromatography
- Mass Spectroscopy Interfaces
- Microfluidic Connections

Industrial

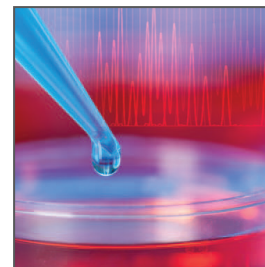
- Package Leak Testing
- Evaporative Cooling Systems



Fluidics



Capillary Electrophoresis



Flow Cytometry

Polymicro Technologies™ Tight-Tolerance VS

Flexible Fused Silica Capillary Tubing



Specifications

Material Description	Material	Core Internal Diameter (µm)	Core Outer Diameter (µm)	Coating Thickness (µm)	Tubing Length Available	Strength	Operating Temperature
TSP020375VS	Pure Synthetic Fused Silica with Durable Polyimide Coating	20 ± 1	363 ± 10	20	Up to 10 Meters per spool	100% Proof Tested	-65 to +350°C
TSP025375VS		25 ± 1					
TSP030375VS		30 ± 1					
TSP040375VS		40 ± 1					
TSP050375VS		50 ± 1					
TSP075375VS		75 ± 2*					
TSP100375VS		100 ± 2*					

*ID values down to ±1µm in development.

Additional Capabilities

Custom inner diameter and outer diameter sizes and tolerances

Internal and external coatings

Shaped cross-sectional geometries

Precision cleaving

Laser cutting

Windowing

Custom arrays and assemblies



www.molex.com/polymicro/capillarytubing.html