

Polymicro Technologies™

Tight-Tolerance VS

Fused Silica Capillary Tubing

molex®

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

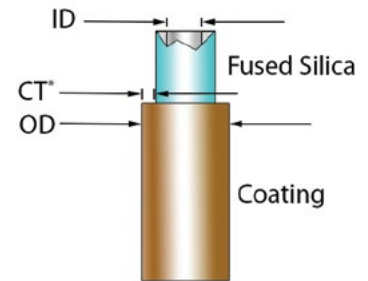
Can be cut or cleaved to any desired length for specific applications, requirements and solutions. High purity provides inert inner surfaces

Custom options available

Boosts design efficiency



Polymicro Technologies™ Tight-Tolerance Vision System (VS) Flexible Fused Silica Capillary Tubing



Polymicro Technologies™ Polymide Capillary Tubing

Applications

Scientific

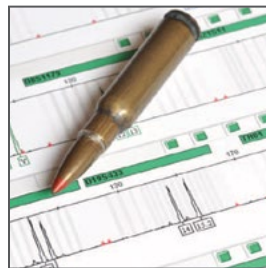
- Nanoflow Liquid Chromatography
- Mass Spectroscopy Interfaces
- Microfluidic Connections

Industrial

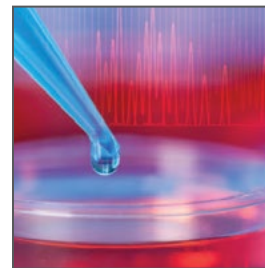
- Package Leak Testing
- Evaporative Cooling Systems

Medical

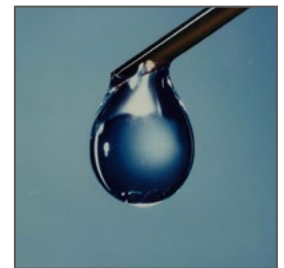
- Precision Drug Delivery
- Flow Control Systems
- Clinical / Diagnostics Devices



Capillary Electrophoresis



Flow Cytometry



Fluidics

Ordering Information and Specifications

Material Number	Product Description	Material	Inner Diameter (µm)	Outer Diameter (µm)	Coating Thickness (µm)	Tubing Length Available	Strength	Operating Temperature
106815-0041	TSP020375VS	Pure Synthetic Fused Silica with Durable Polyimide Coating	20 ± 1	363 ± 10	20	Up to 10.0m per spool	100% Proof Tested	-65 to +350°C
106815-0042	TSP025375VS		25 ± 1					
106815-0043	TSP030375VS		30 ± 1					
106815-0044	TSP040375VS		40 ± 1					
106815-0045	TSP050375VS		50 ± 1					
106815-0046	TSP075375VS		75 ± 2*					
106815-0047	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