

Polymicro Technologies™

nano-Capillary

Fused Silica Capillary Tubing

molex®

Building on industry-leading capabilities, Polymicro Technologies™ nano-Capillary tubing delivers cost-effective, high-performance capillary tubing with internal diameters ranging from 200 to 1000 nanometers for Scientific, Industrial and Medical applications

Features and Benefits

Sub-1µm ID capillary tubing

- Offers potential for single molecule analysis
- Utilizes round channel geometry
- Assures accurate dimensions through SEM verification

Pure synthetic fused silica capillary

- Mirror-smooth interior surfaces for stable flow of liquids and gases
- Low metal ion content provides an inert inner surface
- Facilitates efficient cleaving or cutting for custom lengths of tubing

Polyimide coating

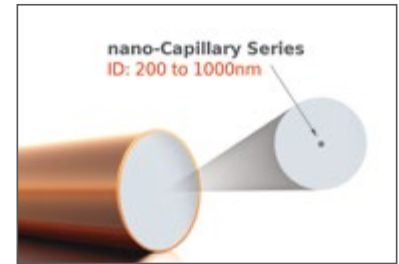
- Offers excellent abrasion resistance during handling and usage
- Resists temperatures up to +350°C with standard coating
- Allows product flexure with superior bend radius

Industry-standard OD dimension

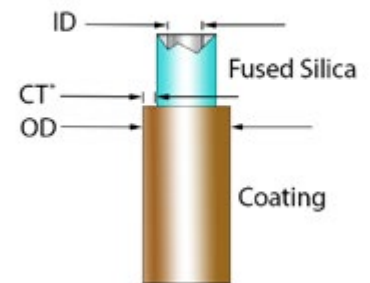
- Interfaces easily with existing fitting technologies
- Provides significant advantages in prototyping and system optimization

Custom options available

- Boosts design efficiency and can be tailored to virtually any application



Polymicro Technologies™ nano-Capillary Tubing



Polymicro Technologies™ Fused Silica Capillary Diagram

Applications

Scientific

Analytical Chemistry
Chromatographic Techniques
Nano-Fluidics
On-Column Monitoring
Evanescence Based Sensing
Coaxial Light and Fluidic Devices

Industrial

Package Leak Testing
Evaporative Cooling Systems
Petroleum Analysis
Catalytic Research

Medical

Precision Drug Delivery
Flow Control Systems
Clinical and Diagnostics Devices
Wearable Drug Delivery Devices Scientific

Product Overview

Material Number	Product Description	Inner Diameter (nm)	Outer Diameter (um)	Coating Thickness (um)	nano-Capillary Length
106815-0033	TSP000.2375NC	200 ± 100	363 ± 10	20	Up to 10m per spool Max.
106815-0034	TSP000.4375NC	400 ± 100			
106815-0035	TSP000.6375NC	600 ± 100			
106815-0036	TSP000.8375NC	800 ± 100			
106815-0037	TSP001.0375NC	1000 ± 100			

Capillary Accessories

Inner-Loks™ GC Y Union

Y-shaped capillary connectors used in Gas Chromatography as:

- Connectors
- Jumpers
- Splicers
- Gas mixtures
- Splits one flow line into two columns
- Splits flow into two detectors
- MOQ – 2 pieces



Inner-Lok™ GC Y Union

Inner-Loks™ GC Union

Unions are straight capillary used in Gas Chromatography, Liquid Chromatography and columns as:

- Splitters
- Splicers
- Connect guard columns
- Connect transfer line
- Repairs broken columns
- End fittings
- Ferrules (Single & Double Flared)
- MOQ – 3 packs (total 15 pieces)



Inner-Lok™ GC Union

Cleaving Stones

This is a tool designed for cutting capillary tubing and optical fiber. Capillary can be cleaved to any desired length. (When used properly it produces a Standard Cleave: Can be used to produce a Rough Cut.)
 Custom Logos printing available
 MOQ – 10 pieces



Cleaving stone

Accessories Overview

Material Number	Product Description	Taper ID Minimum	Taper ID Maximum	Outside Diameter	Nominal Length	Package Size
106845-0059	Inner-Lok™ GC Y Union	200um	300um	1800 +0/-20um	38mm	10
106845-0099	Inner-Lok™ GC Union 5PK					5

Material Number	Product Description	Image	Material	Dimensions	Package Size
106868-0064	Cleaving Stone	Molex – Polymicro Technologies™	Ceramic Tile	1" x 1" x 1/32"	Individual

Inner-Lok™ is a registered trademark of Polymicro Technologies

www.molex.com/polymicro