

Capillary PEEK Tubing

- ▶ 360 µm, 510 µm, or 1/32" outside diameter available
- ▶ IDs as small as 25 µm (0.001")

Capillary PEEK tubing offers all the benefits of larger sized PEEK tubing, while serving as an excellent alternative to more traditional fused silica and stainless steel capillary tubing (see Application Note, right). The capillary tubing can be coupled to many of the products in the Connectors chapter (starting on page 34) and to some of the valves in the Valves chapter (starting on page 124).



Fused Silica Tubing

- ▶ Five inner diameters with most common capillary outside diameter, 360 µm
- ▶ Cut in convenient lengths, up to 2 m

These products are manufactured from synthetic fused silica with a polyimide coating.



APPLICATION NOTE

- ▶ An independent study conducted by a major pharmaceutical company indicated LC-MS chromatographic performance could be improved in some cases by switching the post-column transfer line from fused silica to PEEK polymer tubing. The switch dramatically reduced peak tailing and eliminated the degradation of peak symmetry as injection volume was reduced. For more information, please contact us or order the "Improved LC-MS Results Study" from the "Request Literature" section of our website at www.idex-hs.com.
- ▶ To straighten PEEK polymer tubing, first choose a piece of stainless steel tubing with an inner diameter slightly larger than the OD of your tubing and with an appropriate length for the PEEK tubing you wish to straighten. For instance, for 1/16" OD PEEK tubing with a length of 10", choose our U-825 tubing (stainless steel, 1/8" OD x 0.080" ID x 25 cm long, page 64). Slip your PEEK tubing into the stainless steel tubing. Place this "sleeved" tubing into an oven and bake at 425 °F (218 °C) for 30 minutes or 350 °F (177 °C) for 60 minutes. Allow the sleeved tubing to return to room temperature naturally (i.e., do not quench it with water). Once cooled, remove the PEEK tubing from the stainless steel sleeve and inspect it for straightness. If needed, repeat the process until the desired straightness is achieved.

NOTE

Because the thru-hole of our 25 µm ID PEEK tubing is very small, it is possible for some fittings to cause the ID to become occluded. Please use caution, especially with wrench-tightened fittings. For more information, please contact IDEX Health & Science or your local Distributor directly.

Part No.	ID	Color	Max. Pressure	Qty.
CAPILLARY PEEK TUBING, 360 µm OD				
1574	25 µm (0.001") ID x 5' (1.5 m)	Natural	5,000 psi (345 bar)	ea.
1570	50 µm (0.002") ID x 5' (1.5 m)	Natural	2,000 psi (138 bar)	ea.
1573	75 µm (0.003") ID x 5' (1.5 m)	Black	2,000 psi (138 bar)	ea.
1571	100 µm (0.004") ID x 5' (1.5 m)	Red	2,000 psi (138 bar)	ea.
1572	150 µm (0.006") ID x 5' (1.5 m)	Yellow	2,000 psi (138 bar)	ea.
CAPILLARY PEEK TUBING, 510 µm (0.020") OD				
1543	0.0025" (65 µm) ID x 5' (1.5 m)	Natural	2,000 psi (138 bar)	ea.
★ 1541	0.005" (0.125 mm) ID x 5' (1.5 m)	Natural	2,000 psi (138 bar)	ea.
1542	0.010" (0.254 mm) ID x 5' (1.5 m)	Natural	2,000 psi (138 bar)	ea.
CAPILLARY PEEK TUBING, 1/32" OD				
1567	0.001" (25 µm) ID x 5' (1.5 m)	Natural	5,000 psi (345 bar)	ea.
1579	0.0025" (65 µm) ID x 5' (1.5 m)	Natural	5,000 psi (345 bar)	ea.
1578	0.0035" (90 µm) ID x 5' (1.5 m)	Black	5,000 psi (345 bar)	ea.
1576	0.005" (0.125 mm) ID x 5' (1.5 m)	Red	5,000 psi (345 bar)	ea.
1577	0.007" (0.175 mm) ID x 5' (1.5 m)	Yellow	5,000 psi (345 bar)	ea.
1575	0.008" (0.20 mm) ID x 5' (1.5 m)	Natural	5,000 psi (345 bar)	ea.
1580	0.009" (0.23 mm) ID x 5' (1.5 m)	Gray	5,000 psi (345 bar)	ea.
1581	0.010" (0.25 mm) ID x 5' (1.5 m)	Blue	5,000 psi (345 bar)	ea.
1568	0.015" (0.40 mm) ID x 5' (1.5 m)	Natural	5,000 psi (345 bar)	ea.
★ 1569	0.020" (0.50 mm) ID x 5' (1.5 m)	Orange	3,000 psi (207 bar)	ea.
787-KIT	1/32" OD x 12" Kit Kit contains (1) 10-pack of each 1/32" OD x 12" size listed above.			Kit
FUSED SILICA TUBING, 360 µm OD				
★ FS-120	20 µm (0.0008") ID x 2 m (6.4')	Natural	10,000 psi (690 bar)	ea.
★ FS-150	50 µm (0.002") ID x 2 m (6.4')	Natural	10,000 psi (690 bar)	ea.
FS-175	75 µm (0.003") ID x 2 m (6.4')	Natural	10,000 psi (690 bar)	ea.
FS-110	100 µm (0.004") ID x 2 m (6.4')	Natural	10,000 psi (690 bar)	ea.
FS-115	150 µm (0.006") ID x 2 m (6.4')	Natural	10,000 psi (690 bar)	ea.

SPECIFICATIONS & DETAILS

Capillary PEEK Tubing Specifications

Tubing OD	Tubing ID	OD/ID Tolerances
360 µm	All	±0.0005" (12.5 µm)
510 µm	All	±0.001" (25 µm)
1/32"	All	±0.0005" (12.5 µm)

Fused Silica Tubing Specifications

Tubing OD	Tubing ID	OD Tolerance	ID Tolerance
360 µm	20 µm (0.0008")	±0.0004" (10 µm)	±0.00008" (2 µm)
360 µm	50 µm (0.002") and 75 µm (0.003")	±0.0004" (10 µm)	±0.00012" (3 µm)
360 µm	100 µm (0.004") and 150 µm (0.006")	±0.0004" (10 µm)	±0.00016" (4 µm)