

PTFE Liner



Actual Product image



Our PTFE Liner features ultra thin wall (0.0003") with tight tolerance, maximize your ID or minimize your OD with our qualified catheter liner. The continuous spooling process on the silver-plated copper-core mandrel realizes the streamlining and reduces cost significantly through the entire catheter assembly process. Ideal for the smaller catheter to enable the efficient delivery of procedures.

Specifications

Features

- Ultra thin wall: 0.0003" - 0.0005" (8 μ m - 13 μ m)
- Wall tolerance: \pm 0.00008" (\pm 2 μ m)
- Inside diameter: 0.01" - 0.11" (0.3mm - 2.8mm)
- Excellent lubricity and chemical resistance.
- Supplied on spool with silver-plated copper-core mandrel (lengths up to 1500 meter)

Supplied on spool



Quality control

- OD is monitored on the entire length
- Pin hole check on the entire length (Marking at the pin hole .)

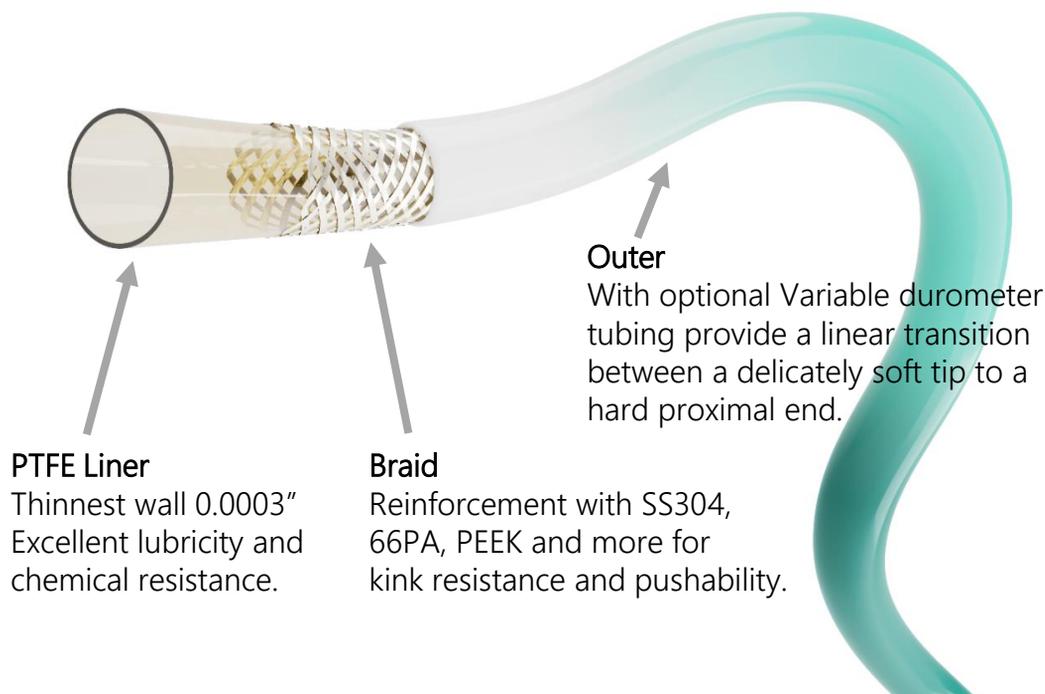
Tie layer enhances Adhesion

PTFE liner can be supplied with etched or a thin thermoplastic Tie layer (8 μ m) to enhance adhesion. Option of cut lengths or continuous-spooled lengths is available.

Other options

- We can produce PTFE lined tubing with reinforcements such as coil and braided with material including SS304, tungsten, polymeric filament such as 66PA, or PEEK.
- Outer jacketing is also available in a variety of materials including Nylon, polyurethane, HDPE, LDPE, or numerous other materials.

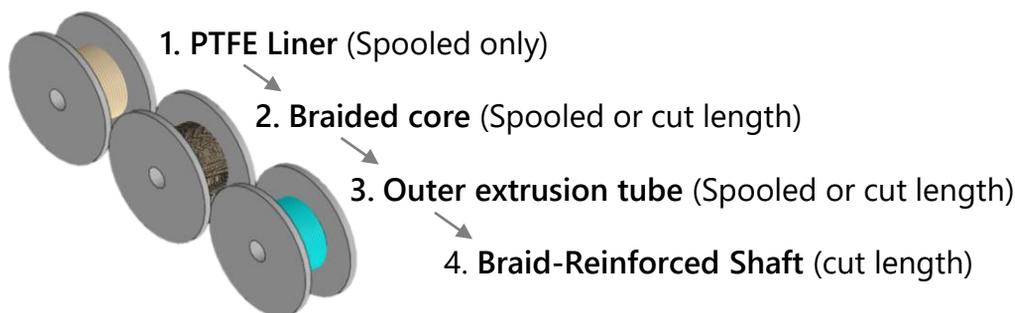
Braid-Reinforced Shaft



With our continuous spooling process ensuring exceptional consistency with tighter tolerance, we can design, develop, and manufacture engineered shaft for a complex catheter. The shaft is designed to balance flexibility, pushability, kink resistance, and more, with our capability in a wide range of materials, including PTFE, Pebax®, PA12, stainless steel, etc.

Shaft specifications

Wall thickness :	Min. 0.003" (0.08mm)
Inner diameter :	0.012" - 0.11" (0.3 – 2.8mm)
Outer diameter :	0.018" - 0.14" (0.46 – 3.5mm)
Typical application :	Micro catheter, Delivery catheter
Medical field :	Neuro, Peripheral, Interventional Oncology
Supplied :	Continuous-spooled or cut length, details below



Detail specifications of each product

1. PTFE Liner



- Supplied on spool with silver-plated copper-core mandrel
- Tightly controlled wall tolerance: ±0.00008" (±2µm)
- Pin hole check on the entire length (Marking at the pin hole .)
- Inside diameter: 0.01" – 0.11" (0.3mm – 2.8mm)
- Optional etched or thermoplastic tie layer for adhesion

2. Braid



1 wire traveling over 2 wires then under 2 wires

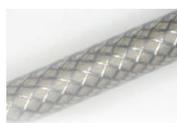


1 wire traveling over 1 wire then under 1 wire

Carrier number	16 braid standard: 2 over / 2 under PPI:10-400	8 braid 1 over / 1 under PPI:10-400	48 braid standard: 2 over / 2 under PPI:30-1200	24 braid 1 over / 1 under PPI:30-1200
Material	SS304	Min Limit Round wire 0.00165"/40um Flat wire 0.001"x0.002" / 25um x 50um	1 or 2 wire each carrier	
	Terminal treatment: laser weld or laser cut with marker			
	Tungsten	Min Limit Round wire 0.0005"/10um Flat wire 0.0002"x0.0016" / 7um x40um	1 or 2 wire each carrier	
	Terminal treatment: laser weld or laser cut with marker			
	66PA	Only 0.0007" x 7 wire / 18um x 7 wire		1 or 2 wire each carrier
	LCP	Only 0.0007" x 6 wire / 18um x 6 wire		1 or 2 wire each carrier
	PEEK	Min Limit Round wire 0.0020"/50um	Flat wire NA	1 or 2 wire each carrier
	PPS	Min Limit Round wire 0.0022"/56um	Flat wire NA	1 or 2 wire each carrier
PFA	Min Limit Round wire 0.0039"/100um	Flat wire NA	1 or 2 wire each carrier	

3. Outer extrusion tube

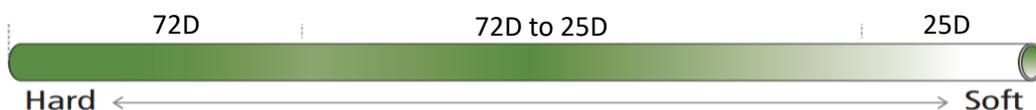
- ID/0.01"-0.11" (0.3-2.8mm)
- OD/0.013"-0.14" (0.33-3.5mm)
- Length/MAX 110" (2800mm)



- Material Nylon-Pebax® Poly Urethane-Pellethane® LLDPE ETFE-C-88AXB®
- Nylon-Vestamid® Poly Urethane-Tecothane® HDPE PFA-P-62XP®
- Nylon-Grilamid® Poly Urethane-TECOFLEX® LDPE EFEP-RP5000®
- Nylon-Rilsamid® Poly Urethane-Carbothane® PVDF-kyner®
- Poly Urethane-Isoplast® PEEK-381G® Etc...

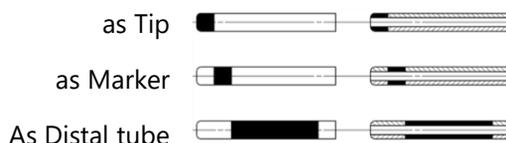
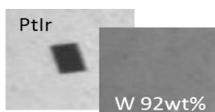
Option1: Variable durometer

With variable flexibility along their length, this tubing may be used where a proximal push and rotation along with a delicately soft tip is desirable to access the treatment area. For the benefit of seamless flexibility and streamlining process, used to replace manually connecting joint tubing

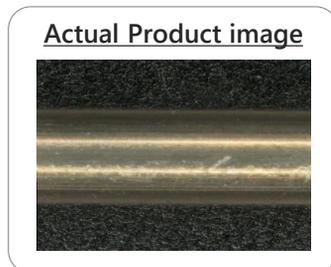


Option2: Radiopaque resin tube

This tubing may be used where tip, marker and distal tube. It shows excellent radiographic visibility comparable to Ptlr.



Tie layer



Our Tie layer coating on PTFE Liner enhances adhesion between the outer jacket and inner liner to reduce delamination. Our continuous spool to spool process on the silver-plated copper-core mandrel realizes exceptional consistency with tighter tolerance that streamlines your catheter manufacturing through the entire catheter assembly process.

Specifications

- Thin wall: Min. 8 μ m (0.0003")
- Wall tolerance: $\pm 5\mu$ m (± 0.0002 "), depend on material
- Inside diameter: 0.01" - 0.11" (0.3mm - 2.8mm)
- Material: Pebax[®]. Vestamid[®], Tecothane[®], Tecoflex[®], Carbothane[®], etc.
- Supplied: Spooled up to 1500meter, or cut length up to 2800mm (110")

Outer diameter range consistency

Our continuous spool-to-spool process realizes exceptional consistency.

99.7% is within range ($\pm 3.2\mu$ m) with actual data of Tie layer on PTFE Liner as below.

