StreamLiner™ Series

Ultra-Thin-Walled PTFE Catheter Liners

Overview-

Zeus PTFE Sub-Lite-Wall™ StreamLiner™ series takes our Sub-Lite-Wall™ family to the next level with the thinnest PTFE catheter liners in the industry. Available in multiple configurations, our StreamLiner™ series sets the standard for advanced catheter designs.

StreamLiner™-

StreamLiner™ represents our thinnest and most flexible free-extruded PTFE liners. Pairing max wall thicknesses of 0.001" (0.025 mm) and below with best-in-class tensile strength, free-extruded StreamLiner™ catheter liners enable advanced catheter designs with smaller profiles or larger working channels.

StreamLiner™ OTW-

StreamLiner™ Over-The-Wire (OTW) helps bridge the gap between film-cast and free-extruded liner technology. Blending strength and flexibility with nominal wall thicknesses as low as 0.0004" (0.0102 mm), StreamLiner™ OTW catheter liners open new pathways for delivering lifesaving therapies.

StreamLiner™ NG-

StreamLinerTM NG is the latest addition to the StreamLinerTM family. Thanks to Zeus' proprietary film-cast process, which helps reduce surface imperfections and pinholes, StreamLinerTM NG catheter liners take flexibility, mechanical performance, and reliability to the next level while still featuring the exceptional sizing and tolerances of existing StreamLinerTM offerings.







COEFFICIENT OF FRICTION

TENSILE STRENGTH





StreamLiner™ Series catheter liners are available in multiple configuration options.

APPLICATIONS

- Catheter liners and access sheaths used in:
 - o Endovascular
 - Neurovascular
 - Peripheral
 - o Structural Heart
 - ° CRM / EP

CAPABILITIES AND SIZING

- Inside diameters from 0.004" 0.120" (0.102 mm - 3.048 mm)
- ID tolerances as low as ± 0.0005" (± 0.0127 mm)
- Nominal wall thicknesses from 0.0004"
 0.00075" (0.0102 mm 0.01905 mm)
- Wall tolerances as low as ± 0.0002" (± 0.0051 mm)
- Available in straight cut lengths

KEY PROPERTIES

- High lubricity
- Improved flexibility
- High tensile strength
- Class VI approved resins available
- Chemical resistance
- ETO and autoclave sterilizable
- Excellent dielectric insulating properties



StreamLiner™ Series

All PTFE StreamLiner™ catheter liners are produced based on customer specifications and the chart below is a general capability guide. All material can be etched on the OD to enhance adhesion. For even greater jacket-to-liner adhesion, a tie layer coating can also be applied.

PTFE StreamLiner™			
	StreamLiner™	StreamLiner™ OTW	StreamLiner™ NG
MATERIAL	PTFE	PTFE	PTFE
PROCESS	Free-Extruded	Extruded Over-The-Wire	Proprietary Film-Cast
MANDREL	None	Silver-plated copper, Stainless steel	Silver-plated copper
INSIDE DIAMETER (ID)	0.004" - 0.120" (0.102 mm - 3.048 mm)	0.013" - 0.0915" (0.330 mm - 2.3241 mm)	0.017" - 0.0915" (0.432 mm - 2.3241 mm)
ID TOLERANCE	± 0.0005" - 0.001" (± 0.0127 mm - 0.025 mm)	± 0.0005" (± 0.0127 mm)	± 0.0005" (± 0.0127 mm)
NOMINAL WALL THICKNESS	0.0005" - 0.00075" (0.0127 mm - 0.01905 mm)	0.0004" - 0.00075" (0.0102 mm - 0.01905 mm)	0.0005" - 0.00075" (0.0127 mm - 0.01905 mm)
WALL TOLERANCE	± 0.00025" (± 0.00635 mm)	± 0.0002" - 0.00025" (± 0.0051 mm - 0.00635 mm)	± 0.00025" (± 0.00635 mm)
CUT LENGTH	86" Max.* (2184.4 mm Max.)	86" Max. (2184.4 mm Max.)	86" Max.* (2184.4 mm Max.)
SURFACE TREATMENTS	Etched, Tie Layer	Etched	Etched, Tie Layer
STERILIZATION METHODS	Autoclave, EtO	Autoclave, EtO	Autoclave, EtO
STRENGTH	••••	$\bullet \bullet \bullet \bullet \circ \circ$	••••
FLEXIBILITY	••••	$\bullet \bullet \bullet \bullet \bullet$	••••

^{*} Liners with a Tie Layer have a maximum cut length of 78" (1981.2 mm).

StreamLinerTM and StreamLinerTM OTW may be shipped with product labels that feature VT, XT, or UT size designations. VT represents a standard nominal wall thickness of 0.0005" (0.0127 mm). XT represents a standard nominal wall thickness of 0.0005" (0.0127 mm). UT represents a standard nominal wall thickness of 0.0004" (0.0102 mm).