

# Sub-Lite-Wall™ Multi-Lumen

Ultra-Thin-Walled PTFE Multi-Lumen Tubing

## Overview-

The design and production of steerable and deflectable catheters can be a difficult challenge, especially when manufacturers are required to procure and bundle several individual liners of varying sizes into a final catheter assembly. This delicate bundling process is time consuming and prone to error in both development and manufacturing settings.

Zeus PTFE Sub-Lite-Wall™ multi-lumen tubing helps simplify the process while eliminating multiple manufacturing steps and complex tooling by providing engineers a single, process-ready multi-lumen extrusion. Consisting of one large central lumen with one to four smaller satellite lumens, Zeus PTFE Sub-Lite-Wall™ multi-lumens enable advanced catheter designs with improved structural integrity, planarity, and other precision steering capabilities.

As a part of our Sub-Lite-Wall™ family of ultra-thin-walled extrusions, Sub-Lite-Wall™ multi-lumen tubing can be produced with 0.0035" (0.0889 mm) max average wall thicknesses.

## Special Note:

*All Sub-Lite-Wall™ multi-lumens are custom ordered to a drawing. Please see the "Design Your Sub-Lite-Wall™ Multi-Lumen" guide on the second page.*



COEFFICIENT OF FRICTION



CHEMICAL RESISTANCE



CONTINUOUS SERVICE TEMP



*Sub-Lite-Wall™ tubing helps simplify steerable catheter production and improve yields.*

## APPLICATIONS

- Steerable catheters used in:
  - Cardiovascular
  - Neurovascular
  - Peripheral
  - Structural Heart
  - CRM / EP

## CAPABILITIES AND SIZING

- 1 large center lumen with 1-4 external satellite lumens
- ID lumen sizes from 0.010" to 0.300" (0.254 mm to 7.62 mm)
- External lumens available in round and elliptical shapes
- ID tolerances as low as  $\pm 0.001"$  (0.025 mm)
- 0.0035" (0.0889 mm) max average wall
- Etched OD available upon request
- Cut lengths up to 86"  $\pm 1"$
- Tie Layer available upon request (max cut length with Tie Layer is 72"  $\pm 1"$ )

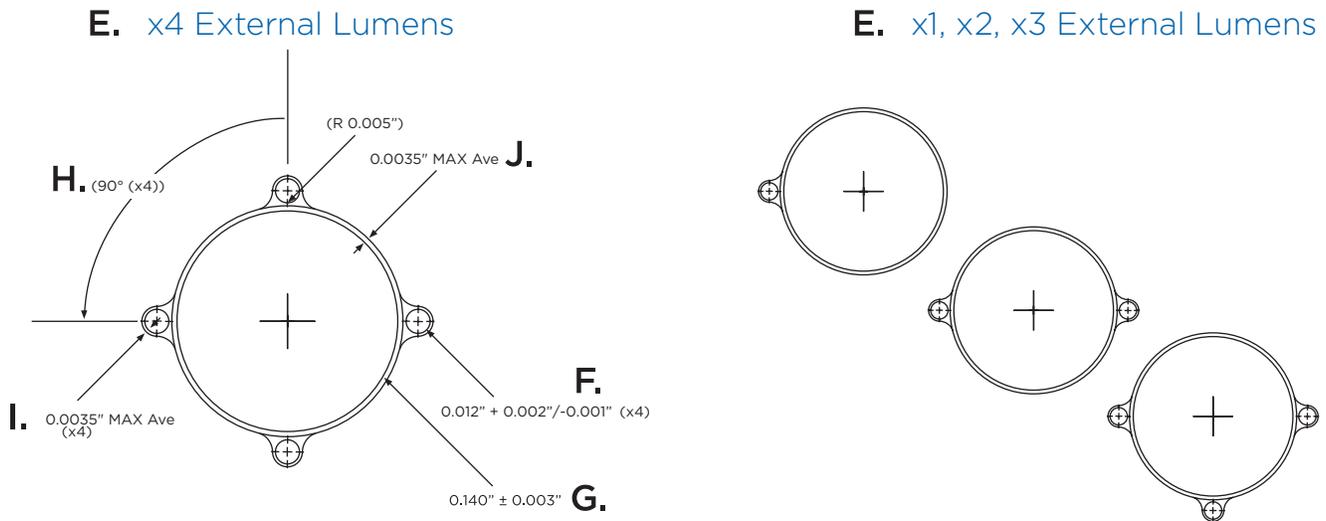
## KEY PROPERTIES

- Class VI approved resins available
- Highly lubricious
- Working temperature to 260 °C (500 °F)
- Excellent dielectric strength / insulation properties



# Design Your Sub-Lite-Wall™ Multi-Lumen

Below drawings are for reference only. Sub-Lite-Wall™ multi-lumens are available in multiple configurations. Satellite lumens can be internal, external, or embedded.



## SPECIFICATION GUIDE TO DESIGN AND BUILD YOUR PTFE SUB-LITE-WALL™ MULTI-LUMEN: (See list of values and examples below)

	Extrusion Specifications:	Enter Value:	Completed Example:
A.	Material		PTFE
B.	Color		Natural
C.	Etch OD		Yes
D.	Tie Layer		Yes; Tie Layer type: 55D
E.	Number of external lumens (1 to 4)		x4
F.	ID of external lumens (include tolerance)		0.012" + 0.002"/-0.001" (x4)
G.	ID of internal lumen (1) (include tolerance)		0.140" ± 0.003"
H.	Spacing between external lumens		x4; Ref: 90 degrees
I.	Wall Thickness - external lumen		0.0035" MAX Ave Wall
J.	Wall Thickness - internal lumen		0.0035" MAX Ave Wall
K.	Cut Length (include tolerance)		72" ± 1"
L.	Tensile Target (as applicable)		N/A
M.	Elongation Target (as applicable)		N/A
N.	% Twist Target (as applicable)		N/A
O.	Application		
P.	Other (i.e. packaging, cleanliness)		

\*Once completed, please attach your drawing and submit to your account manager for review.

