

# Drawn Fiber

PEEK, PFA, FEP, ETFE, ECTFE, and PVDF Fiber Extrusions



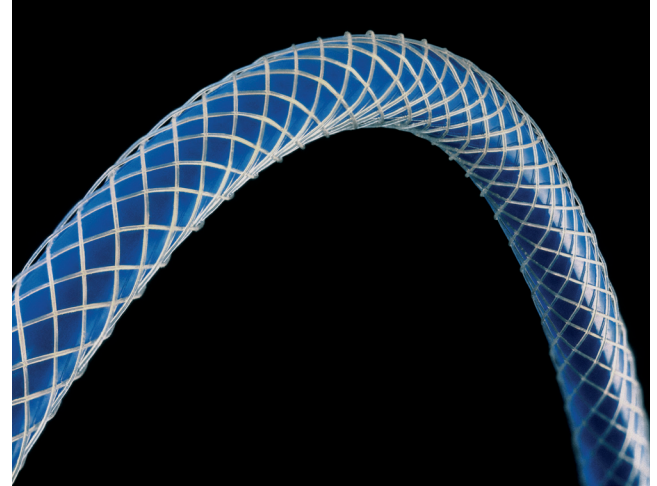
## OVERVIEW

Our drawn fibers can be used to create a braided sleeve or over-braid that is both expandable and flexible for aerospace, automotive and medical markets. The woven braiding is then placed over existing wire assemblies to guard against chaffing and provide additional chemical wear resistance.

Due to the chemical resistance of Zeus fibers, these materials can be woven into meshes to make filters for aggressive chemical environments and as a mist eliminator to filter the moisture out of vapors.

The utilization of nonmetallic materials is a growing trend in medical devices. Drawn fiber used as a braiding component in guide catheters enables MRI compatibility. With its high tensile strength and flexibility, Zeus fibers provide medical device manufacturers a polymer alternative to metal componentry. The introduction of this material provides additional flexibility at the distal tip of steerable and deflectable guide catheters.

Zeus is currently capable of extruding fibers in sizes ranging from 0.002" - 0.040" (0.051 mm - 0.102 mm). We also offer rectangular profiles as small as 0.001" x 0.003" (0.0254 mm x 0.0762 mm). To meet the specific industry requirements for braiding identification.



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FLEXURAL MODULUS



CHEMICAL RESISTANCE



DIELECTRIC STRENGTH

### PEEK FIBER

- High tensile strength
- Abrasion resistant
- Lightweight material

### PFA FIBER

- Superior purity
- Chemical resistant
- Long service life

### FEP FIBER

- Very robust
- Luminous transmittance of 96%
- Excellent lubricity

### ETFE (Tefzal®) Fiber

- Superior mechanical toughness
- Chemical inertness
- Radiation resistance

### ECTFE (Halar®) Fiber

- Impact and temperature resistant
- Superior surface smoothness
- Excellent value

### PVDF FIBER

- UV stability
- Mechanically tough
- Abrasion resistant

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## INFORMATION OF NOTE

Properties based on standard Zeus PEEK Fiber. Custom colors, diameters and properties available. Contact Zeus to discuss.

### PEEK FIBER SPECIFICATIONS

Specification	0.010" Diameter	0.011" Diameter	0.016" Diameter	Units
Min OD - 3 STD DEV	0.0085	0.0095	0.0145	inches
Max OD + 3 STD DEV	0.0115	0.0125	0.0175	inches
Min Tensile Strength	4	5.5	11	lbs
Min Tenacity	3	3.6	3.7	GPD
Min Rel Elongation @ 2 GPD	4	5	5	%
Max Rel Elongation @ 2 GPD	9	10	11	%
Min Elongation @ Break	18	18	20	%
Max Elongation @ Break	30	30	35	%
Min Shrinkage	3	3	2	%
Max Shrinkage	5	5	6	%