MONOFILAMENT

PTFE Monofilament

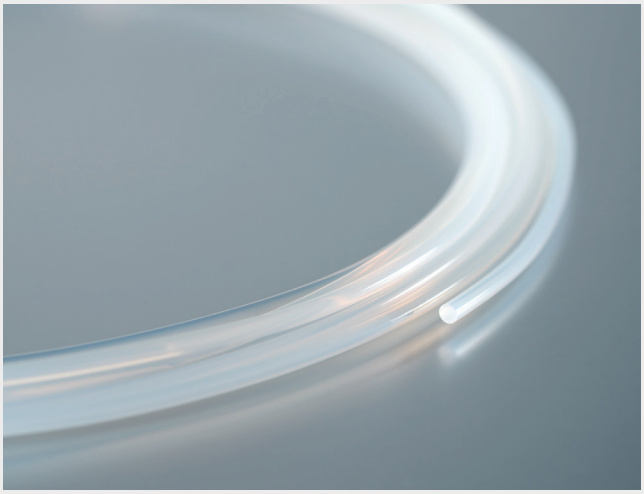
Natural and Glass-filled Extrusions

OVERVIEW

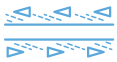
PTFE's properties have made it a highly popular polymer for many advanced applications. When extruded, PTFE monofilament is frequently used as a space filler inside cables due to its insulation qualities, chemical inertness, and broad temperature tolerance. For manufacturing processes requiring higher compressive strength than native PTFE monofilament, Zeus can extrude PTFE monofilament compounded with glass.

Glass filled PTFE monofilament is ideal for use as mandrels for catheter construction and is the perfect replacement for stainless steel mandrels. With added compressive strength, PTFE glass-filled monofilament acting as mandrels stands up to the high temperatures needed for catheter construction and the jacket reflow process yet are easily removed after this final step.

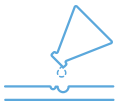
Zeus offers both standard and custom sizes with samples available at no charge to build prototypes.



PTFE glass-filled monofilament can be used as mandrels and is often used as a manufacturing aid due to the higher compressive strength.



COEFFICIENT OF FRICTION



CHEMICAL RESISTANCE

HARDNESS

APPLICATIONS

- *Catheter manufacturing aid*
- *Replacement for stainless steel or other metal mandrels*
- *Space filler inside cables*

CAPABILITIES AND SIZING

- *Standard sizes from 0.028" to 0.150" (0.71 to 3.81 mm)*
- *Custom sizes available upon request*

KEY PROPERTIES

- *Lubricity*
- *Smooth surface finish*
- *Higher compressive strength (glass-filled) than regular PTFE monofilament*
- *Continuous service temperature to 260 ° C / 500 °F*
- *High chemical resistance*
- *Excellent insulating properties*

ZEUS®

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INFORMATION OF NOTE

Supplied in natural color unless otherwise specified. Custom Pantone® colors or Zeus standard colors available on request. Material and product dimensions comply with ASTM 3295. Lot to lot testing is also available upon request.

ASTM-D-3295 (Group 05)

PTFE MONOFILAMENT			
Ordered as Diameter		**Tolerances (±)**	
in.	**mm**	**in.**	**mm**
0.028	0.711	0.002	0.051
0.031	0.787	0.002	0.051
0.035	0.889	0.002	0.051
0.039	0.991	0.002	0.051
0.047	1.194	0.002	0.051
0.050	1.270	0.002	0.051
0.055	1.397	0.002	0.051
0.062	1.575	0.002	0.051
0.070	1.778	0.002	0.051
0.078	1.981	0.003	0.076
0.094	2.388	0.003	0.076
0.100	2.540	0.003	0.076
0.109	2.769	0.003	0.076
0.125	3.175	0.003	0.076
0.150	3.810	0.003	0.076