# PEEKshrink™

*PEEK Heat Shrink Extrusions*

*PEEKshrink™ provides all the benefits of PEEK but in a heat shrinkable form.*

## Overview

PEEK, a linear, semi-crystalline aromatic polymer, is considered one of the highest performing thermoplastic materials; it can withstand extreme temperatures, high pressure and caustic fluids. Now, Zeus has taken PEEK to an entirely new level of performance with PEEKshrink™.

PEEKshrink™ provides a shrink-to-fit layer of protection for sensitive components and critical connections. PEEKshrink™ is an ideally suited product for challenging environments such as oil and gas exploration where abrasion, intense pressure, chemicals, water, or dielectric interference pose a threat to wires and electrical components. PEEKshrink™ is an obvious and optimal splicing aid for PEEK insulated wire. PEEKshrink™ is an alternative to traditional fluoropolymer protective coatings with its very wide working temperature range.

CONTINUOUS SERVICE TEMP

DIELECTRIC STRENGTH

ABRASION RESISTANCE

## Applications

- *Electrical component covering*
- *Medical device protection*
- *Wire and cable encapsulation and insulation*
- *Impact and wear resistant insulation*
- *Mandrel covering*

## Capabilities and Sizing

- *Available in colors for identification purposes*
- *Available in cut lengths or continuous lengths, spooled*
- *Consistent shrink ratios of 1.4:1 and up*
- *Expanded ID range of 0.038" to 2.5" (0.965 to 63.5 mm)*
- *Recovered wall range of 0.004" to 0.010" (0.102 to 0.254 mm)*

## Key Properties

- *High continuous service temperature (500 °F / 260 °C)*
- *Extends life of the protected item*
- *Assures reliable performance*
- *Adhesion to metals*
- *Translucent recovery shrink temperature 572 °F to 644 °F (300 °C to 340 °C)*
- *Opaque recovery shrink temperature 680 °F to 725 °F (360 °C to 385 °C)*

# PEEKshrink™

*Heat Shrink for Challenging Environments*

Standard put-up length: 4 ft.

We specialize in customizing our PEEKshrink™ product line to your needs. Contact us to discuss sizes, lengths, and shrink ratios, or to request free samples.

## PEEKSHRINK™ 1.4:1 HEAT SHRINKABLE AWG TUBING

| ZEUS P/N | ORDERED AS AWG SIZE | AS SUPPLIED INSIDE DIAMETER MIN. | | RECOVERED DIMENSION AFTER SHRINKING | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | ID MAX. | | WALL THICKNESS MINIMUM | | WALL THICKNESS NOMINAL | | WALL THICKNESS MAXIMUM | |
| | | in. | mm | in. | mm | in. | mm | in. | mm | in. | mm |
| 85322 | 17 | 0.038 | 0.965 | 0.027 | 0.686 | 0.005 | 0.127 | 0.007 | 0.178 | 0.009 | 0.229 |
| 85318 | 16 | 0.045 | 1.143 | 0.032 | 0.813 | | | | | | |
| 85184 | 15 | 0.055 | 1.397 | 0.039 | 0.991 | | | | | | |
| 85204 | 14 | 0.085 | 2.159 | 0.060 | 1.524 | | | | | | |
| 85197 | 13 | 0.092 | 2.337 | 0.065 | 1.651 | | | | | | |
| 85189 | 12 | 0.101 | 2.565 | 0.072 | 1.829 | | | | | | |
| 85313 | 11 | 0.112 | 2.845 | 0.080 | 2.032 | | | | | | |
| 85310 | 10 | 0.125 | 3.175 | 0.089 | 2.261 | | | | | | |
| 85298 | 9 | 0.137 | 3.480 | 0.098 | 2.489 | | | | | | |
| 85294 | 8 | 0.160 | 4.064 | 0.114 | 2.896 | | | | | | |
| 85146 | 7 | 0.174 | 4.420 | 0.124 | 3.150 | | | | | | |
| 85063 | 6 | 0.200 | 5.080 | 0.143 | 3.632 | | | | | | |
| 85213 | 5 | 0.221 | 5.613 | 0.158 | 4.013 | | | | | | |
| 85236 | 4 | 0.252 | 6.401 | 0.180 | 4.572 | | | | | | |
| 85243 | 3 | 0.277 | 7.036 | 0.198 | 5.029 | | | | | | |
| 85246 | 2 | 0.316 | 8.026 | 0.226 | 5.740 | | | | | | |
| 85255 | 1 | 0.349 | 8.865 | 0.249 | 6.325 | | | | | | |
| 85326 | 0 | 0.392 | 9.957 | 0.280 | 7.112 | | | | | | |

## PEEKSHRINK™ TUBING PROPERTIES*

| PROPERTIES | ASTM | UNITS | |
|---|---|---|---|
| Tensile Modulus | D638 | KSI | 1,309 |
| Tensile Stress at Yield | D638 | PSI | 14,503 |
| Glass Transition Temp | D3418 | °F / °C | 321 / 161 |
| Dielectric Strength | D149 | V/mil | 3570 |
| Thermal Endurance | NEMA MW 1000 | °F / °C | 752 / 400 |
| Crystallinity | D3814 | % | 40 |

**This data is based on PEEKshrink™ recovered on a 0.575" mandrel. Tubing performance and characteristics may change based on tubing size.*