# **Dual-Shrink**®

PTFE/FEP Encapsulation



### OVERVIEW

Dual-Shrink<sup>®</sup> is constructed with an external layer of PTFE heat shrink and an inner layer of FEP. This product is designed to provide a tight and moisture resistant bond over wires, cables, connectors, sensors, terminals, splices, and many other components.

When heated the outer layer of PTFE shrinks tightly over inserted parts while the inner FEP layer flows into a solid or near-solid encapsulation with a fit so tight that it can withstand the high stresses involving pull and vibration. Dual-Shrink® provides all of the outstanding electrical, chemical, and mechanical properties of PTFE and FEP combined into a superior heat shrink for the most secure encapsulations. We offer Dual-Shrink® in custom sizes, tolerances, colors, and lengths upon request.

Wire splicing technicians in aerospace, medical, oil and gas, automotive, and electrical industries have relied on Zeus to provide robust heat shrinkable products to meet a broad spectrum of demands. Our Dual-Shrink® tubing delivers this same high performance and more to our customers around the world.



#### SECONDARY/VALUE-ADD SERVICES:

**Cut Lengths and Pieces** 

Before (top) and after shrinking (bottom): Dual-Shrink® forms tightly over varied component shapes and forms.



#### APPLICATIONS

- Component encapsulation
- Electrical connections
- Wire splicing

### CAPABILITIES AND SIZING

- Standard and lightweight wall thicknesses
- Standard sizes up to 1" (25.4 mm) in diameter
- Custom sizing also available
- Colors
- Striping

#### **KEY PROPERTIES**

- Tight, moisture-proof encapsulation
- Chemically resistant
- Sterilizable
- Protection against corrosion
- Working temperature up to 450 °F / 323 °C



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## INFORMATION OF NOTE

Packaging: Standard 4 ft. lengths unless otherwise specified.

Custom Pantone colors or Zeus standard colors available.

Free samples available upon request.

| STANDARD WALL |                        |        |                                     |        |                                  |       |  |  |  |  |
|---------------|------------------------|--------|-------------------------------------|--------|----------------------------------|-------|--|--|--|--|
| ltem No.      | As Supplied<br>ID Min. |        | Recovered dimension after shrinking |        |                                  |       |  |  |  |  |
|               |                        |        | ID will shrink to<br>at least:      |        | Total wall thickness:<br>nominal |       |  |  |  |  |
|               | in.                    | mm     | in.                                 | mm     | in.                              | mm    |  |  |  |  |
| ZDS-S-036     | 0.036                  | 0.914  | 0.000                               | 0.000  | N/A                              | N/A   |  |  |  |  |
| ZDS-S-060     | 0.060                  | 1.524  | 0.000                               | 0.000  | N/A                              | N/A   |  |  |  |  |
| ZDS-S-130     | 0.130                  | 3.302  | 0.000                               | 0.000  | N/A                              | N/A   |  |  |  |  |
| ZDS-S-160     | 0.160                  | 4.064  | 0.000                               | 0.000  | N/A                              | N/A   |  |  |  |  |
| ZDS-S-190     | 0.190                  | 4.826  | 0.062                               | 1.575  | 0.035                            | 0.889 |  |  |  |  |
| ZDS-S-250     | 0.250                  | 6.350  | 0.125                               | 3.175  | 0.035                            | 0.889 |  |  |  |  |
| ZDS-S-350     | 0.350                  | 8.890  | 0.190                               | 4.826  | 0.035                            | 0.889 |  |  |  |  |
| ZDS-S-450     | 0.450                  | 11.430 | 0.312                               | 7.925  | 0.055                            | 1.397 |  |  |  |  |
| ZDS-S-700     | 0.700                  | 17.780 | 0.440                               | 11.176 | 0.055                            | 1.397 |  |  |  |  |
| ZDS-S-950     | 0.950                  | 24.130 | 0.630                               | 16.002 | 0.065                            | 1.651 |  |  |  |  |

| LIGHTWEIGHT WALL |                        |        |                                     |        |                                  |       |  |  |  |
|------------------|------------------------|--------|-------------------------------------|--------|----------------------------------|-------|--|--|--|
| ltem No.         | As Supplied<br>ID Min. |        | Recovered dimension after shrinking |        |                                  |       |  |  |  |
|                  |                        |        | ID will shrink to<br>at least:      |        | Total wall thickness:<br>nominal |       |  |  |  |
|                  | in.                    | mm     | in.                                 | mm     | in.                              | mm    |  |  |  |
| ZDS-L-065        | 0.065                  | 1.651  | 0.000                               | 0.000  | N/A                              | N/A   |  |  |  |
| ZDS-L-115        | 0.115                  | 2.921  | 0.045                               | 1.143  | 0.015                            | 0.381 |  |  |  |
| ZDS-L-130        | 0.130                  | 3.302  | 0.060                               | 1.524  | 0.015                            | 0.381 |  |  |  |
| ZDS-L-180        | 0.180                  | 4.572  | 0.065                               | 1.651  | 0.015                            | 0.381 |  |  |  |
| ZDS-L-190        | 0.190                  | 4.826  | 0.070                               | 1.778  | 0.015                            | 0.381 |  |  |  |
| ZDS-L-240        | 0.240                  | 6.096  | 0.150                               | 3.810  | 0.020                            | 0.508 |  |  |  |
| ZDS-L-350        | 0.350                  | 8.890  | 0.210                               | 5.334  | 0.025                            | 0.635 |  |  |  |
| ZDS-L-480        | 0.480                  | 12.192 | 0.315                               | 8.001  | 0.032                            | 0.813 |  |  |  |
| ZDS-L-700        | 0.700                  | 17.780 | 0.500                               | 12.700 | 0.040                            | 1.016 |  |  |  |
| ZDS-L-1000       | 1.000                  | 25.400 | 0.700                               | 17.780 | 0.045                            | 1.143 |  |  |  |

