## DUNBAR

## PTFE2S

## 2:1 SHRINK RATIO, POLYTETRAFLUOROETHYLENE TUBING STANDARD WALL

## Applications

PTFE2S is a standard wall, flame retardant heat shrinkable polytetrafluoroethylene tube. It is designed for a wide range of applications requiring high heat-resistance.

## Features

$\star$ In stock for immediate shipments
$\star$ Shrink ratio: $50 \%$ shrink ratio in the radial direction, $\pm 20 \%$ in the axial direction
$\star$ Continuous operating temperature: $-75^{\circ} \mathrm{C}$ to $260^{\circ} \mathrm{C}$
$\star$ Highly heat-resistance
$\star$ High resistance to chemicals and oils

## Standard

^ MIL-DTL-23053/12 Class 2
$\star$ RoHS Compliant

## Specification Values

| Property |  | Test Method | Value |
| :---: | :---: | :---: | :---: |
| Physical | Specific Gravity | ASTM D792 | 2.13-2.0 |
|  | Elongation | ASTM D638 | 200-450\% |
|  | Tensile Strength | ASTM D638 | 2000-4500 psi |
|  | Flexural Strength | ASTM D790 | No break |
|  | Compressive Strength | ASTM D695 | 3500 psi |
|  | Flexural Modulus | ASTM D790 | $71000-85000 \mathrm{psi}$ |
|  | Hardness Durometer | ASTM D636 | D-50-65 |
|  | Abrasion Resistance | Taber | 12 (1000 revs) |
| Electrical | Dielectric Strength | ASTM D149 | 500 (125 MIL) |
|  |  | ASTM D149 | $\geq 1400$ (10 MIL) |
|  | Volume Resistivity | ASTM D257 | $>10^{18} \Omega-\mathrm{cm}$ |
|  | Surface Resistivity | ASTM D257 | $>10^{17} \Omega-\mathrm{cm}$ |
| General | Chemical/Solvent Resistance | ASTM D543 | No corrosion |
|  | Water Absorption | ASTM D570 | <0.01 |
|  | Deformation Under Load | ASTM D621 | No growth |
|  | Flammability Rating | UL 94 | VO |

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Fully recovered after heating

Product Dimensions

| Size | Ex | ed | Recovered |  |  |  | 23053/12 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Internal Diameter (min.) <br> (D) |  | Internal Diameter (max.) <br> (d) |  | Total Wall Thickness <br> (t) |  |  |
| AWG Size | In. | mm | In. | mm | In. | mm | Class 2 |
| 24 | . 050 | 1.27 | . 027 | . 686 | . $012 \pm .002$ | . $305 \pm .051$ | 201 |
| 22 | . 055 | 1.40 | . 032 | . 813 | . $012 \pm .002$ | . $305 \pm .051$ | 202 |
| 20 | . 060 | 1.53 | . 039 | . 991 | . $016 \pm .003$ | . $406 \pm .076$ | 203 |
| 19 | . 065 | 1.65 | . 043 | 1.09 | . $016 \pm .003$ | . $406 \pm .076$ | 204 |
| 18 | . 076 | 1.93 | . 049 | 1.25 | . $016 \pm .003$ | . $406 \pm .076$ | 205 |
| 17 | . 085 | 2.16 | . 054 | 1.37 | . $016 \pm .003$ | . $406 \pm .076$ | 206 |
| 16 | . 093 | 2.36 | . 061 | 1.55 | . $016 \pm .003$ | . $406 \pm .076$ | - |
| 15 | . 110 | 2.79 | . 067 | 1.70 | . $016 \pm .003$ | . $406 \pm .076$ | 207 |
| 14 | . 120 | 3.05 | . 072 | 1.83 | . $016 \pm .003$ | . $406 \pm .076$ | 208 |
| 13 | . 140 | 3.56 | . 080 | 2.03 | . $016 \pm .003$ | . $406 \pm .076$ | 210 |
| 12 | . 150 | 3.81 | . 089 | 2.26 | . $016 \pm .003$ | . $406 \pm .076$ | 211 |
| 11 | . 170 | 4.32 | . 101 | 2.57 | . $016 \pm .003$ | . $406 \pm .076$ | 212 |
| 10 | . 191 | 4.85 | . 112 | 2.85 | . $016 \pm .003$ | . $406 \pm .076$ | 213 |
| 9 | . 205 | 5.21 | . 124 | 3.15 | . $020 \pm .004$ | . $508 \pm .102$ | 214 |
| 8 | . 240 | 6.10 | . 141 | 3.58 | . $020 \pm .004$ | . $508 \pm .102$ | 216 |
| 7 | . 270 | 6.86 | . 158 | 4.01 | . $020 \pm .004$ | . $508 \pm .102$ | 217 |
| 6 | . 302 | 7.67 | . 178 | 4.52 | . $020 \pm .004$ | . $508 \pm .102$ | 218 |
| 5 | . 320 | 8.13 | . 198 | 5.03 | . $020 \pm .004$ | . $508 \pm .102$ | 219 |
| 4 | . 370 | 9.40 | . 224 | 5.69 | . $020 \pm .004$ | . $508 \pm .102$ | 220 |
| 3 | . 390 | 9.91 | . 249 | 6.32 | . $020 \pm .004$ | . $508 \pm .102$ | 221 |
| 2 | . 430 | 10.92 | . 278 | 7.06 | . $020 \pm .004$ | . $508 \pm .102$ | 223 |
| 1 | . 450 | 11.43 | . 311 | 7.90 | . $020 \pm .004$ | . $508 \pm .102$ | 224 |
| 0 | . 470 | 11.94 | . 347 | 8.81 | . $020 \pm .004$ | . $508 \pm .102$ | 226 |
| Fractional Size |  |  |  |  |  |  |  |
| 1/8" | . 215 | 5.46 | . 130 | 3.30 | . $020 \pm .004$ | . $508 \pm .102$ | 215 |
| 1/4" | . 410 | 10.41 | . 260 | 6.60 | . $020 \pm .004$ | . $508 \pm .102$ | 222 |
| 5/16" | . 470 | 11.94 | . 329 | 8.36 | . $020 \pm .004$ | . $508 \pm .102$ | 225 |
| 3/8" | . 560 | 14.22 | . 399 | 10.13 | . $025 \pm .006$ | . $635 \pm .152$ | 228 |
| 7/16" | . 655 | 16.64 | . 462 | 11.73 | . $025 \pm .006$ | . $635 \pm .152$ | 229 |
| 1/2" | . 750 | 19.05 | . 524 | 13.31 | . $025 \pm .006$ | . $635 \pm .152$ | 230 |
| 5/8" | . 930 | 23.62 | . 655 | 16.64 | . $030 \pm .006$ | . $762 \pm .152$ | 231 |
| 3/4" | 1.125 | 28.58 | . 786 | 19.96 | . $035 \pm .008$ | . $889 \pm .203$ | 232 |
| 7/8" | 1.310 | 33.27 | . 911 | 23.14 | . $035 \pm .008$ | . $889 \pm .203$ | 233 |
| 1" | 1.500 | 38.10 | 1.036 | 26.31 | . $035 \pm .008$ | . $889 \pm .203$ | 234 |

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