

Electronics

Highly Flame-Retardant, Very Flexible, Low-Shrink-Temperature, Polyolefin **Tubing**

Product Facts

- 2:1 shrink ratio
- **■** Low shrink temperature reduces installation time and the risk of damage to temperature-sensitive components
- Very flexible; doesn't easily wrinkle when bent
- Highly flame-retardant
- Hot stamps extremely well
- Higher temperature rating, better thermal stability, and higher resistance to physical abuse than noncrosslinked materials
- Free of polybrominated biphenyls (PBBs) and polybrominated biphenyl oxides and ethers (PBBOs and PBBEs), which are classified as environmentally hazardous substances



Versafit

Single Wall Tubing



Applications

Cost-effective choice for many commercial and military applications; electrically insulates and protects in-line components, disconnect terminals, and splices. Bundles wires for very flexible light-duty harnesses. Strain-relieves electrical wire connections for commercial applications. Identifies or color-codes wires, cables, terminals, and components.

Installation

Minimum shrink temperature: 70°C [158°F] Minimum full recovery temperature: 90°C [194°F]

Operating Temperature Range

-55°C to 135°C [-67°F to 275°F]

Specifications/Approvals

| Series | UL ,51 | CSA ⑤ ° | Military | Raychem |
|----------|-----------------------------|------------------------------|-----------------------------------|---------|
| Versafit | E35586 VW-1 600 V, 125°C | LR31929 VW-1 600 V, 125°C | AMS-DTL-23053/5* Classes 1 & 3 | RW-3009 |

^{*}Formerly MIL-I-23053/5 and MIL-DTL-23053/5.

| Available in: | Americas | Europe | Asia Pacific | |
|---------------|----------|--------|--------------|--|
| | | | | |



Electronics

Product Dimensions

Single Wall Tubing

Raychem

Versafit (Continued)

| | Inside Dia | Recovered Wall | |
|----------|-----------------------------------|---------------------------------|------------------------------|
| Size | Minimum Expanded as Supplied | Maximum Recovered After Heating | Thickness** After Heating |
| 3/64 | 1.63 ± 0.2 [0.064 ± 0.008] | 0.6 [0.023] | 0.40 ± 0.08 [0.016 ± 0.003] |
| 1/16 | 1.85 ± 0.2 [0.073 ± 0.008] | 0.8 [0.031] | 0.43 ± 0.08 [0.017 ± 0.003] |
| 3/32 | 2.79 ± 0.2 [0.110 ± 0.008] | 1.2 [0.046] | 0.51 ± 0.08 [0.020 ± 0.003] |
| 1/8 | $3.43 \pm 0.2 [0.135 \pm 0.008]$ | 1.6 [0.062] | 0.51 ± 0.08 [0.020 ± 0.003] |
| 3/16 | 5.21 ± 0.3 [0.205 ± 0.010] | 2.4 [0.093] | 0.51 ± 0.08 [0.020 ± 0.003] |
| 1/4 | $7.11 \pm 0.3 [0.280 \pm 0.010]$ | 3.2 [0.125] | 0.64 ± 0.08 [0.025 ± 0.003] |
| 3/8 | 10.16 ± 0.4 [0.400 ± 0.015] | 4.8 [0.187] | 0.64 ± 0.08 [0.025 ± 0.003] |
| 1/2 | 13.72 ± 0.4 [0.540 ± 0.015] | 6.4 [0.250] | 0.64 ± 0.08 [0.025 ± 0.003] |
| 5/8*** | 16.90 ± 0.4 [0.665 ± 0.015] | 8.0 [0.315] | 0.76 ± 0.08 [0.030 ± 0.003] |
| 3/4 | 20.45 ± 0.4 [0.805 ± 0.015] | 9.5 [0.375] | 0.76 ± 0.08 [0.030 ± 0.003] |
| 1 | 25.53 ± 0.4 [1.055 ± 0.015] | 12.7 [0.500] | 0.89 ± 0.12 [0.035 ± 0.005] |
| 1 1/4*** | 33.40 ± 0.7 [1.315 ± 0.025] | 15.9 [0.625] | 1.02 ± 0.15 [0.040 ± 0.006] |
| 1 1/2 | 39.88 ± 0.8 [1.570 ± 0.030] | 19.1 [0.750] | 1.02 ± 0.15 [0.040 ± 0.006] |
| 2 | 52.83 ± 1.0 [2.080 ± 0.040] | 25.4 [1.000] | 1.14 ± 0.16 [0.045 ± 0.007] |
| 3 | $78.49 \pm 1.0 [3.090 \pm 0.040]$ | 38.1 [1.500] | 1.27 ± 0.20 [0.050 ± 0.008] |
| 4 | 104.14 ± 1.3 [4.100 ± 0.050] | 50.8 [2.000] | 1.40 ± 0.23 [0.055 ± 0.009] |

^{**}Wall thickness will be less if tubing recovery is restricted during shrinkage.

Ordering Information

| Color | Standard | Black (-0), white (-9), red (-2), blue (-6), yellow (-4), green (-5) | |
|---------------------------|---|--|--|
| | Nonstandard | Brown (-1), orange (-3), violet (-7), gray (-8) | |
| Size selection | Always order the largest size that will shrink snugly over the component to be covered. Special order sizes are available upon request. | | |
| Standard packaging**** | On spools. | | |
| Ordering description***** | Specify product name, size and color (for example, Versafit 1/4-0). | | |

^{***}Nonstandard size; available by special order only.

^{*****}Available in the convenient RaySpool packaging/dispensing system, for sizes 1/16" up to 1".
*****Europe only. For supply to MIL, Def Stan and BS add -MS, -DS or -BS to ordering description.