

Part Number DWT1000

Header DWT1000 Mil Spec Adhesive Lined Dual Wall Heat Shrink

Description Thermosleeve-USA DWT1000 is an adhesive-lined, cross-linked polyolefin heat-shrinkable tubing with great flexibility and is flame-retardant. The typical electrical applications include repairing damaged cables, sealing connectors and components, covering wire bundles and harness breakouts.

When heated to 110 degree C (230 degrees F), DWT1000 will rapidly shrink and the adhesive will flow freely around the substrate. The adhesive will bond to a variety of materials including metals, plastics and rubbers. Once cooled, the adhesive will solidify, remain flexible and provide an excellent barrier against moisture.

Agency Approval & Compliance UL, CUL, ROHS, Halogen Free, MIL, UL224, REACH, VW1

Application DWT1000 can be used in a variety of applications where environmental issues are a concern. The adhesive lining provides an excellent barrier to moisture and is good choice of material for repairing cables, covering components and other electronic/electrical connections in harsh weather conditions.

Shrink Ratio and Operating Temperature DWT1000 is available in both 2:1 and 3:1 shrink ratio. When fully recovered, the 2:1 material will shrink to one half (50%) of its original supplied diameter and the 3:1 material will shrink to one third of its original supplied diameter. The tubing's wall thickness will also change proportionally to the degree of recovery.

Operating temperature range is from -55 degree C to 135 degrees C (-67 degrees F to 275 degrees F) and the minimum shrink temperature is 110 degree C (230 degrees F)

Standard Sizes and Dimension



Sizes					
2:1					
Size (mm)	Size (inch)	Min as Supplied (D)	Max. after re- covery (d)	Total Wall (T)	Adhesive wall (t)
3.2	1/8"	3.2	1.6	0.60±0.15	0.3
4.7	3/16"	4.8	2.4	0.75±0.15	0.35
6.4	1/4"	6.4	3.2	0.75±0.15	0.35
9.5	3/8"	9.5	4.8	0.80±0.20	0.35
12.7	1/2"	12.7	6.4	0.80±0.20	0.35
19.1	3/4"	19.1	9.5	0.95±0.28	0.4
25.4	1"	25.4	12.7	1.15±0.28	0.45
3:1					
Size (mm)	Size (inch)	Min as Supplied (D)	Max. after recovery (d)	Total Wall (T)	Adhesive wall (t)

3.2	1/8"	3.2	1	0.85±0.28	0.35
4.7	3/16"	4.8	1.5	1.05±0.28	0.45
6.4	1/4"	6.4	2	1.10±0.28	0.45
9.5	3/8"	9.5	3	1.45±0.28	0.45
12.7	1/2"	12.7	4	1.50±0.38	0.45
19.1	3/4"	19.1	6	2.00±0.55	0.65
25.4	1"	25.4	8	2.20±0.55	0.65
38.1	1-1/2"	38.1	13	2.54±0.55	1

Specifications

Item	Specification		
Shrink Temperature (°C)	110 −150°C		
Temperature Range (°C)	-55°C−+135°C		
Radial Shrinking Ratio (%)	≥50; ≥33.3		
Tensile Strength (MPa)	≥10.4 MPa		
Ultimate Elongation (%)	≥200%		
Aging in Circulating-air Oven	158.0±1.0°C, 168 hrs		
Tensile Strength (MPa) - After Aging	≥7.3		
Ultimate Elongation (%) - After Aging	≥100		
Volume Resistivity (Ω.cm)	≥1×10 ¹²		
Dielectric Strength (kV/mm)	≥19.7kv/mm		
Heat Shock	No cracking, dripping, flowing		
Cold Shock	No cracking		
2% scan modulus	≤172MPa		
Water Absorption (%)	Less than 1.0%		
Oil Resistance	24±3°C, 24hrs		
Fluid Resistance	Excellent		

Availability Four-foot lengths, master reels and cut pieces

Important Notice All information contained in this data sheet is believed to be reliable and accurate. It is advised however that the end user of this material evaluate the suitability of the product for their specific application.

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