

**Part Number** DWTRO

**Header** DWTRO Semi-Rigid Dual Wall Heat Shrink Tubing Adhesive -Lined

**Description** Thermosleeve-USA DWTRO is a semi rigid flame retardant dual wall heat shrink tubing with excellent sealing, oil resistance, insulation and mechanical strength properties. DWTRO simultaneously seals and protects and at the same time offers excellent electrical insulation. DWTRO has a tough outer jacket that provides superior strain relief and mechanical protection against abrasion, cut through and flexing. DWTRO over-expanded sizes allow for easy placement over tapered objects and there are only five sizes to cover the diameter range from 5.7mm to 17mm. DWTRO has a minimum shrink temperature rating of 110 degrees C (230 degrees F).

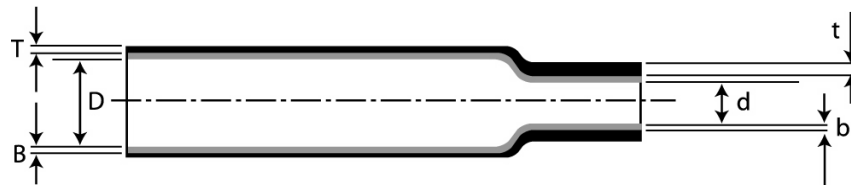
**Agency Approval & Compliance** UL, CUL, ROHS, Flame Retardant, REACH, VW1

**Application** DWTRO heat shrink tubing is well suited and is widely used for special auto bundling of wires and harnesses.

**Shrink Ratio and Operating Temperature** DWTRO has a shrink ratio in excess of 4:1. When fully recovered, the 4:1 material will shrink more than 75 percent (75%) of its original supplied diameter.

DWTRO has a continuous operating temperature rating of -40 degrees C (-40 degrees F) and 125 degrees C (257 degrees F)

**Standard Sizes and Dimension**



Size (mm)	As Supplied		After Recovery		
	Min ID (mm) (D)	Nominal Wall (mm) (T)	Max ID (mm) (d)	Total Wall (mm) (t+b)	Nominal Adhesive Wall (mm) (b)
5.7	≥6.40	0.57	1.25	1.55 ± 0.30	0.88±0.05
7.4	≥7.70	0.60	1.60	1.70 ± 0.30	0.90±0.05
9.02	≥9.50	0.60	2.10	1.90±0.30	1.10±0.06
11.00	≥12.0	0.83	2.30	2.60 ± 0.50	1.45±0.07
14.00	≥14.0	0.76	2.40	2.50 ± 0.50	1.40±0.07
18.30	≥18.30	0.85	4.35	2.60 ± 0.50	1.50±0.08

**Typical Properties**

Item	Specifications
Shrink Temperature (°C)	
Operating Temperature Range (°C)	-40°C—+125°C
Tensile Strength (Mpa)	≥10.4
Ultimate Elongation (%)	≥200
Radial shrinking ratio (%)	≥25
Longitudinal Change (%)	±10
Aging in Circulating-air Oven	158.0±1.0°C, 168hrs
After aging - Tensile Strength (Mpa)	≥7.3
After aging - Ultimate Elongation (%)	≥100
Volume Resistivity (Ω.cm)	≥10 <sup>12</sup>
Sealing	>1 X 10 <sup>8</sup>

**Availability** Four-foot lengths 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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