

Part Number DWHST

Header DWHST 3X Adhesive-Lined Dual Wall Heat Shrink

Description DWHST is adhesive-lined, flexible, halogen free and flame-retardant polyolefin heat-shrinkable dual wall tubing. This tubing has good mechanical strength, which can protect from fluids, moisture and corrosion. DWHST is used in a wide variety of electrical applications, including back end connector sealing, breakouts, and connector-to-cable transitions. A high expansion ratio makes it possible to repair most damaged cable jackets without removing connectors. The product is UL recognized and the file No is E180908.

Agency Approval & Compliance UL, CUL, ROHS, Halogen Free, Flame Retardant, F Mark, UL224, REACH, VW1

Application DWHST series of tubing 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 DWHST series is available in 2:1, 3:1 and 4:1 shrink ratios. When fully recovered, the 2:1 material will shrink to one half (50%) of its original supplied diameter, the 3:1 material will shrink to one third (33.3%) of its original supplied diameter and the 4X material will shrink to one quarter (25%) 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 125 degrees C (-67 degrees F to 257 degrees F) and the minimum shrink temperature is 110 degree C (230 degrees F)

Standard Sizes and Dimension



DWHST(2X)					
Size	As Supplied		After Recovery		
(Inch)	Min ID (mm)	Nominal Wall (mm)	Max ID (mm)	Total Wall (mm)	Nominal Adhesive Wall (mm)
3/64"	1.2	0.3	0.6	0.45±0.12	0.2
1/16"	1.6	0.3	0.8	0.45±0.12	0.2
3/32"	2.4	0.35	1.2	0.55±0.12	0.3
1/8"	3.2	0.4	1.6	0.60±0.15	0.3
3/16"	4.8	0.4	2.4	0.75±0.15	0.35
1/4"	6.4	0.4	3.2	0.75±0.15	0.35
3/8"	9.5	0.4	4.8	0.80±0.20	0.35
1/2"	12.7	0.4	6.4	0.80±0.20	0.35
3/4"	19.1	0.5	9.5	0.95±0.28	0.4
1"	25.4	0.5	12.7	1.15±0.28	0.45
1-1/2"	38.1	0.65	19	1.25±0.41	0.45
2"	50.8	0.73	25.4	1.40±0.41	0.5

DWHST(3X)					
Size	As Supplied		After Recovery		
(Inch)	Min ID (mm)	Nominal Wall (mm)	Max ID (mm)	Total Wall (mm)	Nominal Adhesive Wall (mm)
3/32	2.8±0.4	0.40±0.15	1	0.85±0.25	0.35±0.10
1/8	3.6±0.4	0.40±0.15	1	0.85±0.25	0.35±0.10
3/16	5.1±0.4	0.40±0.15	1.5	1.05±0.25	0.45±0.10
1/4	6.9±0.5	0.45±0.15	2	1.10±0.25	0.45±0.10
5/16	8.4±0.5	0.55±0.20	2.5	1.45±0.25	0.45±0.10
3/8	9.9±0.5	0.60±0.20	3	1.45±0.25	0.45±0.10
1/2	13.3±0.6	0.60±0.20	4	1.50±0.35	0.45±0.15
5/8	16.4±0.7	0.65±0.25	5	1.70±0.40	0.45±0.15
3/4	19.7±0.7	0.75±0.25	6	2.00±0.45	0.65±0.20
1	25.9±0.7	0.75±0.25	8.4	2.00±0.55	0.65±0.20
1-1/4	31.0±1.0	0.80±0.30	10	2.20±0.55	0.75±0.20
1-1/2	41.0±1.0	0.85±0.35	13.7	2.50±0.55	1.00±0.25
2	51.0±1.0	0.85±0.35	16.5	2.50±0.55	1.00±0.25

DWHST(4X)					
Size	As Supplied		After Recovery		
(Inch)	Min ID (mm)	Nominal Wall (mm)	Max ID (mm)	Total Wall (mm)	Nominal Adhesive Wall (mm)
3/16"	4	0.4	1	1.00±0.28	0.5
1/4"	6	0.4	1.5	1.00±0.28	0.5
5/16"	8	0.4	2	1.10±0.28	0.5
3/8"	9.5	0.45	2.5	1.20±0.28	0.55
1/2"	12	0.5	3	1.40±0.28	0.61
5/8"	16	0.6	4	1.78±0.38	0.76
3/4"	19	0.6	4.8	2.00±0.55	0.76
1"	24	0.75	6	2.25±0.55	0.76
1-1/4"	32	0.8	8	2.54±0.55	1.02
1-1/2"	38.1	0.8	9.5	2.54±0.55	1.02
2"	52	0.8	13	2.60±0.55	1.02

Specifications

Item	Specifications
Shrink Temperature (°C)	110
Operating Temperature Range (°C)	-55—125
Tensile Strength (Mpa)	≥10.4
Dielectric Voltage Withstand (v)	600
Ultimate Elongation (%)	≥200
Radial shrinking ratio (%)	≥50
Longitudinal Change (%)	≤15
Aging in Circulating-air Oven	158.0±1.0°C, 168hrs
After aging - Tensile Strength (Mpa)	≥7.3
After aging - Ultimate Elongation (%)	≥100
Dielectric Strength kV/mm	≥15.0
Volume Resistivity (Ω cm)	≥10 ¹³
Flammability	VW-1
Water Absorption (%)	Less than 0.4%
Fluid Resistance	Excellent
(Copper Corrosion)	
Softening Point (°C)	85±5°C
Peel Strength (N/25mm)	>80

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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