

Part Number HST

Header HST Commercial Grade Polyolefin Heat Shrink Tubing

Description Thermosleeve-USA HST is our most popular series of heat shrink tubing and an excellent choice for many general and commercial applications. Economically priced, HST is very flexible, halogen free, flame retardant tubing made from a special blend of cross-linked polyolefin. Typical applications include strain relief of wire connectors; identifies or color codes wire and terminals; electrically insulates components, terminals and wire splices. HST is resistant to common fluids and solvents and has a shrink temperature rating of 90 degrees C (194 degrees F).

Agency Approval & Compliance UL, CUL, RoHS, Halogen Free, Flame Retardant, FMark, UL224, REACH, VW1

Application HST heat shrink tubing is free of Pb, Cd, Hg, Cr+6, PBB and PBDE.CB-HFT and can be used in any enclosed area where a flame-retardant, halogen-free environment is required, such as metro, skyscrapers, mass transit vehicles and ships.

Shrink Ratio and Operating Temperature HST has a 2:1 shrink ratio and when fully recovered, the 2:1 material will shrink to one half (50%) of its original supplied diameter.

HST has a continuous operating temperature rating of -55 degrees C (-67 degrees F) and 125 degrees C (257 degrees F).

Standard Sizes and Dimension



	As Supplied (mm)		After Recovery (mm)	
Size (mm)	Inside Diameter (D)	Wall thickness (T)	Inside Diameter (d)	Wall thickness (t)
Φ0.7	1.0+0.2/-0.1	0.18 ± 0.05	≤0.45	0.32±0.08
Φ0.8	1.2+0.2/-0.1	0.18 ± 0.05	≤0.45	0.34±0.08
Φ1.0	1.5+0.2/-0.1	0.18 ± 0.05	≤0.60	0.36±0.08
Φ1.5	2.1+0.2/-0.1	0.18 ± 0.05	≤0.80	0.36±0.08
Φ2.0	2.5+0.2/-0.1	0.20 ± 0.05	≤1.00	0.42±0.08
Φ2.5	3.0+0.2/-0.1	0.22±0.05	≤1.25	0.46±0.08
Ф3.0	3.5+0.2/-0.1	0.22±0.05	≤1.50	0.46±0.08
Φ3.5	4.0+0.2/-0.1	0.22±0.05	≤1.75	0.46±0.08
Φ4.0	4.6+0.2/-0.1	0.22±0.05	≤2.00	0.46±0.08
Φ4.5	5.0+0.2/-0.1	0.23±0.05	≤2.25	0.46±0.08
Φ5.0	5.5+0.2/-0.1	0.25±0.05	≤2.50	0.50 ± 0.08
Φ5.5	6.0+0.2/-0.1	0.25±0.05	≤2.75	0.50 ± 0.08
Φ6.0	6.5+0.2/-0.1	0.25±0.05	≤3.00	0.55±0.10
Φ6.5	6.9+0.2/-0.1	0.25±0.05	≤3.25	0.55 ± 0.10
Φ7.0	7.5+0.2/-0.1	0.25±0.05	≤3.50	0.55±0.10
Φ8.0	8.5+0.2/-0.1	0.28±0.06	≤4.00	0.58 ± 0.10
Φ9.0	9.5+0.2/-0.1	0.28±0.06	≤4.50	0.58 ± 0.10
Ф10	10.5+0.3/-0.1	0.28±0.06	≤5.00	0.58±0.10
Φ11	11.5+0.3/-0.1	0.28±0.06	≤5.50	0.58±0.10

Ф12	12.5+0.3/-0.1	0.28±0.06	≤6.00	0.58 ± 0.10
Ф13	13.5+0.3/-0.1	0.28±0.06	≤6.50	0.58±0.10
Φ14	14.5+0.3/-0.1	0.28±0.06	≤7.00	0.58 ± 0.10
Φ15	15.5+0.3/-0.1	0.28±0.06	≤7.50	0.58±0.10
Ф16	16.5+0.3/-0.1	0.28±0.06	≤8.00	0.58 ± 0.10
Φ17	17.5+0.3/-0.1	0.28±0.06	≤8.50	0.58±0.10
Ф18	18.5+0.3/-0.1	0.32±0.08	≤9.00	0.68±0.10
Ф20	20.6+0.5/-0.2	0.32±0.08	≤10.0	0.68±0.10
Φ22	22.6+0.7/-0.2	0.35±0.08	≤11.0	0.72±0.12
Φ25	25.6+0.7/-0.2	0.40 ± 0.10	≤12.5	0.78±0.12
Φ28	28.6+0.7/-0.2	0.40 ± 0.10	≤14.0	0.78±0.12
Ф30	30.6+0.7/-0.2	0.40 ± 0.10	≤15.0	0.82±0.12
Ф35	35.6+0.7/-0.2	0.45 ± 0.10	≤17.5	0.92±0.12
Ф40	41.0±0.5	0.50±0.12	≤20.0	1.00 ± 0.15
Φ45	46.0±0.5	0.50 ± 0.12	≤22.5	1.00 ± 0.15
Ф50	51.0±0.5	0.55±0.15	≤25.0	1.10±0.15
Φ55	55.5±1.0	0.55 ± 0.15	≤27.5	1.10 ± 0.15
Ф60	60.5±1.0	0.60±0.15	≤30.0	1.25±0.20
Ф70	71.0±1.0	0.60 ± 0.15	≤35.0	1.25±0.20
Ф80	81.0±1.0	0.60±0.15	≤40.0	1.25±0.20
Ф90	91.0±1.0	0.60 ± 0.15	≤45.0	1.25±0.20
Φ100	101.0±1.0	0.60±0.15	≤50.0	1.25±0.20

Typical Properties

Item	Specifications
Shrink Temperature (°C)	120-150
Temperature Range (°C)	125
Radial Shrinking Ratio (%)	≥50
Longitudinal Change (%)	≤5
Tensile Strength (MPa)	≥10.4
Ultimate Elongation (%)	≥200
Aging in Circulating-air Oven	158.0±1.0°C, 168hrs
Tensile Strength (MPa) - After Aging	≥7.3
Ultimate Elongation (%) - After Aging	≥100
Dielectric Voltage Withstand (V)	600
Volume Resistivity (Ω .cm)	≥10 ¹⁴ sup>
Dielectric Voltage (V) AC	AC2500V-60S, No breakdown
Dielectric Strength (kV/mm)	≤15

Flammability	VW-1
Concentricity (%)	≥65
Heat Shock	4 hr@250.0 ±1.0°C, No cracking
Cold Shock	1 hr@-30.0 ±1.0°C, No cracking
Copper Corrosion	24Hr@95%±5, 2°C, No cracking or fading
Dielectric Strength (@1min, AC2500V)	

Availability Four-foot lengths, One hundred foot mini reels, master reels and cut pieces

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