

Part Number HS3

Header HS3 Commercial Grade Polyolefin Heat Shrink Tubing

Description Wire-Run's HS3 higher shrink ratio accommodates irregular shapes and a wide range of bundle diameters. HS3 is a very flexible, halogen free, flame-retardant polyolefin tubing used in many general and commercial applications. Typical usages include strain relief of wire connectors; identifies or color codes wire and terminals; electrically insulates components, terminals and wire splices. HS3 is resistant to common fluids and solvents, HS3 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 HS3 heat shrink tubing is free of Pb, Cd, Hg, Cr+6, PBB and PBDE. HS3 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 HS3 has a 3:1 shrink ratio and when fully recovered, the 3:1 material will shrink to one third (33%) of its original supplied diameter.

HS3 has a continuous operating temperature rating of -55 degrees C (-67 degrees F) and 125 degrees C (257 degrees F)

Standard Sizes and Dimension



| Size (inch) | Size (mm) | As Supplied (mm) | | After Recovery (mm) | |
|-------------|------------|-----------------------------|--------------------------------|-----------------------------|------------------------|
| | | Min. Inside Diameter (D) | Nominal Wall- thickness (T) | Max. Inside Diameter (d) | Wall- thickness (t) |
| 1/16" | Φ1.5/0.5 | 1.5 | 0.18 | 0.5 | 0.40±0.10 |
| 1/8" | Φ3.0/1.0 | 3 | 0.2 | 1 | 0.55±0.12 |
| 3/16" | Φ4.5/1.5 | 4.5 | 0.2 | 1.5 | 0.55±0.12 |
| 1/4" | Φ6.0/2.0 | 6 | 0.22 | 2 | 0.60±0.12 |
| 3/8" | Φ9.0/3.0 | 9 | 0.25 | 3 | 0.70±0.15 |
| 1/2" | Φ12.0/4.0 | 12 | 0.25 | 4 | 0.70±0.15 |
| 3/4" | Φ20.0/6.7 | 20 | 0.3 | 6.7 | 0.80±0.15 |
| 1" | Φ24.0/8.0 | 24 | 0.36 | 8 | 1.00±0.15 |
| 1-1/2" | Ф39.0/13.0 | 39 | 0.45 | 13 | 1.25±0.20 |

Typical Properties

| Item | Specifications | | |
|----------------------------|----------------|--|--|
| Shrink Temperature (°C) | 100 ~ 140 | | |
| Temperature Range (°C) | 125 | | |
| Radial Shrinking Ratio (%) | 3:1 | | |

| Longitudinal Change (%) | ≤15 |
|---------------------------------------|---------------------|
| 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 |
| Dielectric Voltage (V) AC | |
| Dielectric Strength (kV/mm) | ≥15 |
| Flammability | VW-1 |
| Concentricity (%) | ≥70 |
| Heat Shock | |
| Cold Shock | |

Availability Four-foot lengths, master reels and cut pieces, comes in black and various colors

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