



SMS Heat Shrink Tubing

Adhesive Lined, 4:1, Semi-Rigid, Polyolefin for the Automotive Industry

All-Weather, Heat-Shrinkable, Dual Wall, Polyolefin Tubing for Automotive Wire Harnesses

- Semi-rigid polyolefin
- Provides excellent strain relief
- Functional over wide temperature range
- Puncture resistant
- Resistant to salt water, automotive fluids and corrosive chemicals
- Fire retardant

Product Description

3M™ SMS Heat Shrink Tubing is a co-extruded, dual wall product. It is a composite of a polyolefin shrinkable outer wall and a thermoplastic adhesive inner wall. SMS tubing does not degrade when exposed to automotive and marine environments and is not affected by severe vibration, extreme temperature changes, moisture or automotive fluids.

Typical Application

Semi-rigid SMS tubing is ideal for applications requiring moisture sealing, mechanical protection and strain relief.

The adhesive layer is compatible with typical wire insulation and is intended for moisture sealing and insulation of automotive, RV, truck, trailer, tractor, heavy equipment and marine wire splices, in-line components, fusible links and terminals.

Shrink Ratio

SMS Tubing has a 4:1 shrink ratio. When fully recovered, the tubing will shrink to 25 percent of its original diameter. The recovered wall thickness of the tubing is proportional to the degree of recovery.

Standard Color

The tubing is supplied in black and is color-coded by diameter with printed squares to aid in identification.

Standard Packaging

Cut pieces and 4 foot lengths. See price pages for standard lengths and carton quantities. Other sizes, lengths and packaging options are available, subject to factory quotation.

Printing

Custom printing to identify resistors, diodes and other components is available, subject to factory quotation.

Ordering Information

Order SMS by product name and part number and cut length. Example: SMS 300, 55mm length.

Standard Sizes and Dimensions

Ordering Size	Minimum Expanded I.D.	Maximum Recovered I.D.	Nominal Recovered Melt Wall	Minimum Recovered Outer Wall	Color Code
.220	.220"	.045"	.030"	.027"	Yellow
.300	.300"	.060"	.033"	.028"	White
.350	.350"	.080"	.038"	.033"	Green
.450	.450"	.105"	.043"	.053"	Red
.700	.700"	.175"	.060"	.053"	Orange

Typical Properties*

Physical		Electrical	
Tensile Strength	1900 psi	Dielectric Strength ⁵ (outer wall)	500 V/mil
Ultimate Elongation ¹	350%	Dielectric Withstand	1000 VoltsAC
2% Secant Modulus ²	35,000 psi	Current Leakage	< 0.250 Microamps
Longitudinal Change ¹	+0%, -10%		
Specific Gravity ³ (outer wall)	1.25		
Flammability ⁴	Self-extinguishing		
Heat Aging	135°C (Adhesive softens)		
Thermal Cycle	5°C to 135°C	Chemical	
Vibration	24 hours	Auto Fluid Compatibility	8 fluids
Cold Flex	-30°C		

*Not recommended for specification purposes. Product specifications will be provided upon request.

3M test methods available upon request.

Test Methods

¹ASTM-D 2671

²ASTM-D 882 Procedure A

³ASTM-D 792

⁴ASTM-D 2671 Procedure B

⁵ASTM-D 149

Handling and Safety Precautions

Read all Health Hazard, Precautionary, and First Aid statements found in the Material Safety Data Sheet and/or product label prior to handling or use.

Important Notice

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