

SUMITUBE® SA3

DUAL WALL AUTOMOTIVE SPLICE TUBING, FLAME RETARDED POLYOLEFIN 4 : 1 Shrink Ratio



RoHS/RoHS2 Compliant

TYPICAL FEATURES

- 1) SUMITUBE SA3 is a dual wall, adhesive lined tubing. Upon application of heat, the adhesive liner melts and flows, encapsulating and sealing components contained within.
- 2) The outer jacket of SUMITUBE SA3 is highly flame retarded.
- 3) The 4:1 shrink ratio allows a few sizes to cover a wide range of component and splice diameters.
- 3) SUMITUBE SA3 has a shrink temperature of 130° C.
- 4) Operating temperature range is -40° C to + 130° C.
- 5) SUMITUBE SA3 is recommended for automotive applications requiring environmental sealing, fluid and temperature resistance and outstanding electrical properties.

STANDARD SIZES

| SIZE | INSIDE DIAMETER AS SUPPLIED (MIN.) | | INSIDE DIAMETER AFTER RECOVERY (MAX.) | | TOTAL WALL THICKNESS AFTER RECOVERY (MIN.) | | ADHESIVE THICKNESS (NOM.) | |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------|---------------------------------------------|------|-----------------------------------------------------|------|---------------------------------|------|
| | INCH | (MM) | INCH | (MM) | INCH | (MM) | INCH | (MM) |
| 1 | 0.228 | 5.80 | 0.050 | 1.26 | 0.047 | 1.20 | 0.022 | 0.56 |
| 2 | 0.295 | 7.50 | 0.065 | 1.64 | 0.060 | 1.52 | 0.030 | 0.76 |
| 3 | 0.429 | 10.9 | 0.094 | 2.40 | 0.075 | 1.91 | 0.040 | 1.02 |
| 4 | 0.701 | 17.8 | 0.175 | 4.45 | 0.095 | 2.41 | 0.054 | 1.37 |
| <p>Standard Color: Black</p> <p>Standard Package: Cut pieces, 27mm, 50mm, 65mm, or 1220mm (4 foot lengths)</p> <p>How to Order: (Type of material) (Size) (Color) (Cut length)</p> <p>Example: SA3 -2 Black 50 mm</p> | | | | | | | | |

SA3 SPECIFICATION VALUES

| PROPERTY (UNITS) | TEST METHOD | REQUIREMENTS |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Material: Tensile strength (psi)* Elongation (%) Heat shock (225° C, 4 hrs.) Secant modulus @ 2% (psi)* Dynamic cut through (N) Longitudinal change (%) Volume resistivity (ohm-cm) Flammability Shrink temperature, ° C, complete recovery * Calculated based on wall thickness of jacket only | ASTM D2671 ASTM D2671 ASTM D2671 ASTM D2671 ASTM D3032 ASTM D2671 ASTM D2671 SAE J-1128 ----- | 1500 min. 300 min. no cracking, dripping, or flowing of outer jacket 2.2 X 10 ⁴ min. 150 min. 0 to -10 1 X 10 ¹² min. Pass 130 |
| Splice performance: Current leakage, microamps, initial Current leakage, microamps, after: Thermal humidity cycling Thermal aging Thermal shock Fluid compatibility: IRM 903 oil Power steering fluid Automatic transmission fluid Engine coolant Gunk® Brand degreaser or equivalent No. 2 diesel fuel Windshield wiper solvent ASTM Reference Fuel 'C' SAE J 1703 brake fluid Low temperature flexibility Dielectric withstand test | XLPE wire splices ¹ 5 cycles / -40° to +105° C 168 hrs. / 135° C +125° C to -5° C, 5 cycles 100° C / 1 hr. 100° C / 1 hr. 100° C / 1 hr. 100° C / 1 hr. 23° C / 1 hr. 23° C / 1 hr. 23° C / 1 hr. 23° C / 1 hr. 23° C / 1 hr. 23° C / 1 hr. -30° C / 3 hrs. 1000 volts (RMS) | 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 0.25 max. 60 seconds min. |

¹ Various XLPE ultrasonically welded wire splices. Assorted representative AWG sizes and configurations. Testing per Ford ES-FOEB-1A263-AA & Chrysler PF-10999. Contact SEIP for details.

