

SUMITUBE® A2 (3X)

FLEXIBLE POLYOLEFIN THIN WALL 3 : 1 Shrink Ratio



RoHS Compliant



Lead-Free



Halogen-Free

TYPICAL FEATURES

- 1) SUMITUBE A2(3X) is a very flexible, clear, heat-shrinkable polyolefin tubing. A2(3X) is overexpanded to have a recovery ratio of 3 to 1, as opposed to the normal 2 to 1 recovery.
- 2) A2(3X) has a recovery temperature of 110°C.
- 3) A2(3X) meets the material and functional requirements of AMS-DTL-23053/5C, with exception to dimensions and longitudinal change.
- 3) A2(3X) has an operating temperature range of -55°C to +135°C with up to 200°C for short duration.
- 4) A2(3X) is recommended for use in general purpose applications for protection of components in light wire harness assemblies. It can be used where oversized sub-components prevent the use of a standard heat shrinkable tubing. It can also provide the user with better economies, as one size tubing can often replace 2 standard 2:1 expanded tubing sizes, thereby reducing inventories.

STANDARD SIZES

NOMINAL SIZE (MM)	INSIDE DIAMETER		INSIDE DIAMETER		WALL THICKNESS	
	AS SUPPLIED (MIN)		AFTER RECOVERY (MAX)		AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
1.5/0.5	.060	1.5	.020	0.5	.020	.50
3/1	.120	3.0	.040	1.0	.024	.60
6/2	.240	6.0	.080	2.0	.028	.70
9/3	.360	9.0	.120	3.0	.031	.80
12/4	.480	12.0	.160	4.0	.033	.85
18/6	.720	18.0	.240	6.0	.039	1.0
24/8	.945	24.0	.315	8.0	.048	1.2
40/13	1.575	40.0	.515	13.0	.050	1.25
50/17	1.968	50.0	.680	17.0	.059	1.50
75/25	2.953	75.0	.984	25.0	.065	1.65

Standard Colors: Clear

Standard Package: Spooled (S) (continuous lengths)

How to Order: (Type of material) (Size) (Color) (Packaging)

Example: A2(3X) 6/2 Clear S

A2 (3X) SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
Physical: Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex (-55°C) Heat shock Heat resistance (175°C, 168 hrs.) Elongation (%) Secant modulus (psi) Longitudinal change (%)	ASTM D638 ASTM D638 ASTM D792 AMS-DTL-23053 AMS-DTL-23053 ASTM D638 ASTM D882 AMS-DTL-23053	1500 min. 200 min. 1.35 max. no cracking no cracking 100 min. 2.5 x 10 ⁴ max. +5, -15
Electrical: Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D876 ASTM D876	500 min. 1.0 X 10 ¹⁴ min.
Chemical: Corrosion Water absorption (%) Fluid resistance (23°C, 24 hrs.) Tensile strength (psi) Shrink temperature, nominal	AMS-DTL-23053 ASTM D 570 AMS-DTL-23053	no corrosion 0.5 max. 1000 min. 110°C

Specification reference: AMS-DTL-23053/5C, Class 2, except dimensions and longitudinal change



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