

# SUMITUBE® B2 (3X)

UL/CSA

## FLEXIBLE POLYOLEFIN THIN WALL 3 : 1 Shrink Ratio

UL/ CSA RECOGNIZED 125°C 600V (VW-1)



RoHS Compliant

### TYPICAL FEATURES

- 1) SUMITUBE® B2(3X) is a very flexible, flame-retarded, heat-shrinkable polyolefin tubing. B2(3X) is overexpanded to have a recovery ratio of 3 to 1, as opposed to the normal 2 to 1 recovery. B2(3X) is recognized by UL under Subject 224 as 125°C 600V with a VW-1 rating.
- 2) SUMITUBE® B2(3X) meets the material and functional properties of AMS-DTL-23053/5, Classes 1 & 3, with exception to dimensions.
- 3) B2(3X) has a low recovery temperature of 90°C.
- 4) B2(3X) has an operating temperature range of -55°C to +135°C with up to 200°C for short duration.
- 5) B2(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 AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
	1.5/0.5	.060	1.5	.020	0.5	.020
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	.472	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	2.000	50.0	.670	17.0	.059	1.50
75/25	3.000	75.0	1.000	25.0	.065	1.65
102/34	4.000	102.0	1.330	34.0	.071	1.80

**Standard Colors:** Black, White, Red, Yellow, Blue

**Standard Package:** 4 feet (4') or Spooled (S) (continuous lengths)

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

**Example:** B2(3X) 6/2 Black S

## B2 (3X) SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
<b>Physical:</b> Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex (-55 <sup>0</sup> C) Heat shock Heat resistance (175 <sup>0</sup> 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 <sup>4</sup> max. +5, -15
<b>Electrical:</b> Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D876 ASTM D876	500 min. 1.0 X 10 <sup>14</sup> min.
<b>Chemical:</b> Corrosion Water absorption (%) Fluid resistance (23 <sup>0</sup> C, 24 hrs.) Tensile strength (psi) Flammability Shrink temperature, nominal	AMS-DTL-23053 ASTM D 570  AMS-DTL-23053 UL 224 VW-1	no corrosion 0.5 max.  1000 min. pass 90 <sup>0</sup> C

**Specification reference:** UL 224 125<sup>0</sup>C, 600V, VW-1  
 File E48762 YDPU2, Cat. No. B2(3X) or 826 suffix (3X)  
 CSA C22.2 No. 198.1-98

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