

# SUMITUBE® W3B2

## DUAL WALL FLEXIBLE POLYOLEFIN WITH THICK WALL ADHESIVE

### MILITARY SPECIFICATION

#### TYPICAL FEATURES

- 1) SUMITUBE W3B2 is a flexible, flame-retardant heat-shrinkable polyolefin tubing, with a thick wall modified polyamide adhesive which melts and flows, encapsulating and sealing components contained within.
- 2) SUMITUBE W3B2 complies with the requirements of MIL-DTL-23053/4D, Class 3, in the sizes marked below.
- 3) Shrink temperature is 110° C.
- 4) Operating temperature range is -55° C to + 110° C.
- 5) SUMITUBE W3B2 is recommended for applications requiring water-proofing for light cable and wire harnesses and protection of connector components.

#### STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
* 3/1	.125	3.2	.024	0.6	.037	0.95
4.5/1.5	.189	4.8	.059	1.5	.043	1.1
* 6/2	.252	6.4	.079	2.0	.047	1.2
9/3	.374	9.5	.118	3.0	.051	1.3
* 12/4	.500	12.7	.157	4.0	.056	1.4
19/6	.748	19.0	.236	6.0	.071	1.8
* 24/8	.945	24.0	.315	8.0	.098	2.5
* 40/13	1.575	40.0	.512	13.0	.098	2.5

**Standard Colors:** Black, White  
**Standard Package:** 4 feet (4')  
**How to Order:** (Type of material) (Size) (Color) (Packaging)  
**Example:** W3B2 12/4 Black 4'

\* MIL-Spec sizes



SUMITOMO ELECTRIC



## W3B2 SPECIFICATION VALUES

PROPERTY (UNITS)	TEST METHOD	REQUIREMENTS
<b>Physical:</b> Tensile strength (psi) Elongation (%) Cold impact (-55° C) Heat shock (250° C, 4 hrs.) Secant modulus (psi) Longitudinal change (%)	ASTM D638 ASTM D638 ASTM D746 MIL-DTL-23053 ASTM D882 MIL-DTL-23053	1500 min. 250 min. no cracking no cracking 2.5 X 10 <sup>4</sup> max. +1, -15
<b>Electrical:</b> Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D876 ASTM D876	300 min. 1 X 10 <sup>12</sup> min.
<b>Chemical:</b> Corrosion Water absorption (%) Fluid resistance (23°C, 24 hrs.) Tensile strength (psi) Flammability Shrink temperature, nominal	UL 224 ASTM D570  MIL-DTL-23053 UL 224	no corrosion 1.0 max.  900 min. Pass 110°C

**Specification reference:** UL 224, 125° C, 600V  
 File E75077 YDTU2, Cat. No. SUMITUBE W3B2 or 843  
 MIL-DTL-23053/4D, Class 3