

SUMITUBE® R120(TW)

FLEXIBLE ELASTOMERIC POLYOLEFIN, THIN WALL 2 : 1 Shrink Ratio



RoHS/RoHS2 Compliant

TYPICAL FEATURES

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| <p>1) SUMITUBE R120(TW) is a heat-shrinkable flame retarded elastomer tubing specifically formulated for long term resistance to fluids, heat and mechanical abuse.</p> <p>2) SUMITUBE R120(TW) offers superior protection against aviation and diesel fuels, hydraulic fluids, greases and lubricants.</p> <p>3) SUMITUBE R120(TW) meets the material requirements of AMS-DTL-23053/16. However, since it is a thin wall version of the standard material, it does not meet the wall thickness requirements of AMS-DTL-23053/16.</p> | <p>4) Shrink temperature is 130° C.</p> <p>5) Operating temperature range is -75° C to +120° C.</p> <p>6) SUMITUBE R120(TW) is recommended for protecting cables and wire harnesses on military ground vehicles. It is ideal for a variety of applications requiring ruggedness and fluid resistance.</p> |
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STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
3/16	.187	4.8	.093	2.4	.020	0.51
1/4	.250	6.4	.125	3.2	.025	0.63
3/8	.375	9.5	.187	4.8	.025	0.63
1/2	.500	12.7	.250	6.4	.025	0.63
3/4	.750	19.1	.375	9.5	.030	0.76
1	1.000	25.4	.500	12.7	.035	0.89
1 1/4	1.250	31.8	.625	15.9	.040	1.01
1 1/2	1.500	38.1	.750	19.1	.040	1.01

Standard Colors: Black

Standard Package: Spooled (S)

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

Example: R120(TW) 1/2 Black S

R120(TW) Specification Values

PROPERTY (UNITS)	TEST METHOD	REQUIREMENT
Physical: Tensile strength (psi) Elongation (%) Specific gravity Low temperature flex (-65°C) Heat shock(200° C, 4 hrs) Heat resistance (150°C, 168 hrs.) Tensile stress (psi) Elongation (%) Tensile stress @ 100% elongation (psi) Longitudinal change (%)	ASTM D638 ASTM D638 ASTM D792 AMS-DTL-23053 AMS-DTL-23053 ASTM D638 ASTM D638 ASTM D412 AMS-DTL-23053	1700 min. 250 min. 1.5 max. Pass Pass 1500 min. 200 min. 1500 max. ±10
Electrical: Dielectric strength (volts/mil) Volume resistivity (ohm-cm)	ASTM D876 ASTM D876	300 min. 1.0 X 10 ¹⁰ min.
Chemical: Corrosion, copper contact (121°C, 16 hrs.) copper mirror (135°C, 16 hrs.) Water absorption (%) Fluid resistance (23°C, 24 hrs.) Tensile strength (psi) Flammability Shrink temperature, nominal	AMS-DTL-23053 AMS-DTL-23053 ASTM D570 AMS-DTL-23053 AMS-DTL-23053	no corrosion no corrosion 2.0 max. 1500 min. Pass 150° C

Specification reference: AMS-DTL-23053/16 (with exception to wall thickness)



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