

FLEXIBLE ELASTOMERIC POLYOLEFIN 2 : 1 Shrink Ratio

MILITARY SPECIFICATION



RoHS/RoHS2 Compliant

TYPICAL FEATURES

- 1) SUMITUBE R120 is a heat-shrinkable flame retarded elastomer tubing specifically formulated for long term resistance to fluids, heat and mechanical abuse.
- 2) SUMITUBE R120 offers superior protection against aviation and diesel fuels, hydraulic fluids, greases and lubricants.
- 3) SUMITUBE R120 meets the material and functional requirements of AMS-DTL-23053/16.
- 4) Shrink temperature is 150° C.
- 5) Operating temperature range is -75° C to +120° C.
- 6) SUMITUBE R120 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.

STANDARD SIZES

SIZE	INSIDE DIAMETER AS SUPPLIED (MIN)		INSIDE DIAMETER AFTER RECOVERY (MAX)		WALL THICKNESS AFTER RECOVERY (NOM)	
	INCH	(MM)	INCH	(MM)	INCH	(MM)
1/8*	.125	3.2	.062	1.6	.028	0.70
3/16*	.187	4.8	.093	2.4	.031	0.80
1/4	.250	6.4	.125	3.2	.035	0.90
3/8	.375	9.5	.187	4.8	.039	1.00
1/2	.500	12.7	.250	6.4	.047	1.20
5/8*	.625	15.9	.313	7.9	.052	1.32
3/4	.750	19.1	.375	9.5	.059	1.50
7/8*	.875	22.2	.438	11.1	.065	1.65
1	1.000	25.4	.500	12.7	.071	1.80
1 1/4*	1.250	31.8	.625	15.9	.087	2.20
1 1/2	1.500	38.1	.750	19.1	.094	2.40
1 3/4 *	1.750	44.5	.875	22.2	.095	2.40
2	2.000	50.8	1.000	25.4	.110	2.80
Standard Colors: Black Standard Package: Spooled (S) How to Order: (Type of material) (Size) (Color) (Packaging) Example: R120 1/2 Black S						

* Non MIL-Spec sizes

R120 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


SUMITOMO ELECTRIC
INTERCONNECT PRODUCTS INC.
www.seipusa.com

915 Armorlite Drive
San Marcos, CA 92069

Telephone: (800) 758-3515
FAX: (800) 758-3517

Rev. 3/21/14