

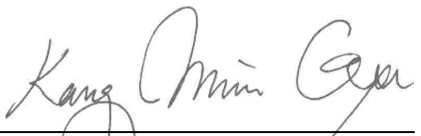
SPECIFICATION

For

heat shrinkable, flexible Fluoroelastomeric
(Shrinkage 2:1) tubing used for 200°C.

(Type designation : LS-V200)

PREPARED BY


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APPROVED BY


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General Manager

1.Scope

This specification covers the requirements for heat shrinkable, flexible Fluoro elastomeric (Shrinkage 2:1) tubing used for 200°C.
(Type designation : LS-V200)

2.Reference Standard

The following documents form a part of this specification to the extent specified herein.
MIL-DTL-23053/13 : Insulation Sleeving, Electrical, Heat shrinkable, Fluoro elastomer, flexible.

3.Standard

The insulation shall be an Fluoro elastomer complying with MIL specification.
Expanded inside diameter and recovered thickness at any point of insulation shall be in the attached table 1. The standard color of insulation is Black.

4.Applied Recipe

The used material of insulation is in the attached table 2.

5.Performance

The following item shall be carried out in accordance with MIL specification.

Test Item	Characteristics	Test condition
Expanded inside diameter	Attached table 1	-
Recovered inside diameter	Attached table 1	-
Recovered thickness at any point	Attached table 1	-

Test Item	Characteristics	Test condition
Unaged	Tensile strength	ASTM D 412 200°C/10 min
	Elongation	
	200% Tensile stress	
	Dielectric strength	
Aged	Tensile strength	ASTM D 412 250°C/168 hrs
	Elongation	
Heat shock	No crack	300°C/4 hrs
Low temperature flex	No crack	-40°C
Restricted shrinkage	No crack	200°C
Voltage withstand	Pass	2,000V/min
Copper corrosion	No pitting or corrosion	175°C/16 hrs
Volume resistivity	Min. $1.0 \times 10^9 \Omega\text{-cm}$	ASTM D 876

Water absorption		Max. 0.5% @ 23°C/24 hrs	ASTM D 570
Fluid resistance *Refer to below test fluid	Tensile strength	Min. 0.84 kgf/mm ²	ASTM D 412
	Elongation	Min. 250%	
Fungus resistance		No growth	ASTM G 21
Flammability		Pass.	ASTM D 2671 Procedure A

※ Test fluid

Fluid	Conforming to
Hydraulic fluid petroleum base	MIL-H-5606
JP-8	MIL-T-5624
Lubricating oil	MIL-L-7808
Lubricating oil	MIL-L-23699
5 percent NaCl	A-A-694
Deicing fluid	MIL-A-8243


6. Storage condition

Keep cool. Don't expose tubes to the direct rays of sun to prevent natural shrinkage and don't keep this package over 8 hours at temperature exceeding 40°C(104F)

Attached Table 1.

Standard Size (Inch size)	팽창후(Expanded)	수축후(Recovered)		Standard Length [m]
	Inside Diameter [mm]	Max. Inside Diameter [mm]	Min. Thick. At any point [mm]	
1/8	3.7± 0.3	1.6	0.65	200
3/16	5.0± 0.3	2.4	0.72	100
1/4	6.9± 0.5	3.2	0.72	100
3/8	10.0±0.5	4.7	0.72	50
1/2	13.2±0.5	6.4	0.72	50
5/8	16.9±1.0	7.9	0.90	50
3/4	20.1±1.0	9.5	0.90	50
7/8	23.2±1.0	11.1	0.92	50
1	27.4±2.0	12.7	0.92	50
1-1/4	34.0±2.0	15.9	1.02	31
1.5	41.0±2.0	19.1	1.02	31

Attached Table 2.

MATERIAL IDENTIFICATION	IDENTI. No	LSCGBT-091016
	ISSUED DATE	Oct. 16. 2009
NOMENCLATURE	HEAT SHRINKABLE FLEXIBLE FLUORO ELASTOMER	
TYPE & STYLE	LS-V200	
BRIEF DESCRIPTION	RATING	200°C
	DESCRIPTION OF RAW MATERIAL	1) MATERIAL OF COMPOUND - Heat Shrinkable Fluoro Elastomer 2) MANUFACTURER OF COMPOUND - LS cable Ltd.
REMARKS	REFERENCE SPECIFICATION : MIL-DTL-23053/13	
<p>WE CERTIFY THAT THE ABOVE MENTIONED MATERIAL HAS BEEN USED</p> <p style="text-align: center;">LS Cable Ltd.</p> <p style="text-align: right;">  <hr style="width: 20%; margin: 0 auto;"/> General Manager H. W. Jang </p>		