



555. Hoge-Dong, Dong An-Gu, Anyang-Shi
Kyungki-Do. 430-080, Korea
Tel : 031) 428-4584, Fax : 031) 428-4161

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Page. : 1 of 4

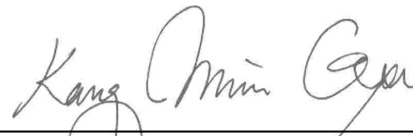
SPECIFICATION

For

Dual wall heat shrinkable, semi-rigid
Polyolefin tubing (Shrinkage 3:1) used for 600V, 110°C.

(Type designation : GSHS-3625WS)

PREPARED BY


MIN - GYU KANG

APPROVED BY


GEONG - IL CHOI
General Manager

1. Scope

This specification covers the requirements for dual wall heat shrinkable, semi-rigid Polyolefin tubing (Shrinkage 3:1) used for 600V, 110°C.

(Type designation : GSHS-3625WS)

2. Reference Standard

The following documents form a part of this specification to the extent specified herein.

UL224 : Extruded insulating tubing

MIL-DTL-23053/4D : Insulation sleeving, Electrical, Heat Shrinkable, Polyolefin, Dual wall, semi-rigid, Outer wall Crosslinked

3. Standard

3-1. Outer jacket

The insulation shall be a irradiated cross-linked polyolefin complying with MIL, UL224 specification and free from bubbles, pinholes, cracks, inclusion of impurities. 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.

3-2. Inner adhesive

The inner adhesive shall be coated to inner surface of outer jacket

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, UL224 specification.

Test Item		Characteristics	Test condition
Unaged	Tensile strength	Min. 1.06 kgf/mm ²	ASTM D638
	Elongation	Min. 200%	
Dielectric Strength		Min. 19.7kv/mm	ASTM D2671
Copper Corrosion		No corrosion	121°C/16 hours
Minimum secant modulus(2% strain)		17.59 kgf/mm ²	ASTM D882
Restricted shrinkage		No crack	175°C/ 30min
Fluid resistance (Refer to below test fluid)	Tensile strength	Min. 0.71 kgf/mm ²	24°C/24 hours
	Dielectric Strength	Min. 15.8kv/mm	24°C/24 hours

Fungus resistance	No growth	ASTM G21
Water absorption	Max. 0.5%	ASTM D570, 23°C/24 hours
Volume resistivity	Min. $10^{14} \Omega\text{-cm}$	ASTM D876
Heat shock	No cracks, flowing or dripping	250°C/4hrs

※ Test fluids

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 대 금지 물질 (Restricted Hazardous Substances)	특성치(Characteristics)	Test Method
Pb	Max. 100	EPA 3050B or EN1122, ICP-AES
Cd	Max. 5	EPA 3050B, ICP-AES
Hg	N.D	EPA 3052, ICP-AES
Cr6+		EPA 3060A
PBBs		With reference to 83/264/EEC and 2003/11/EEC. GC/MS
PBDEs		

N.D : Not detected

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]	Nominal Thickness [mm]	Max. Inside Diameter [mm]	Min. Total Thick. At any point [mm]	
0.40T X 1/8	3.5 ± 0.3	0.40	0.6	0.81	1.2
0.45T X 3/16	5.2 ± 0.4	0.45	1.6	0.94	1.2
0.50T X 1/4	6.8 ± 0.4	0.50	2.1	1.01	1.2
0.50T X 3/8	10.0 ± 0.5	0.50	3.5	1.09	1.2
0.60T X 1/2	13.2 ± 0.5	0.60	5.0	1.22	1.2
0.70T X 3/4	20.1 ± 1.0	0.70	8.0	1.47	1.2
0.70T X 1	26.4 ± 1.0	0.70	10.2	1.73	1.2

