



THAI WONDERFUL WIRE CABLE CO., LTD.

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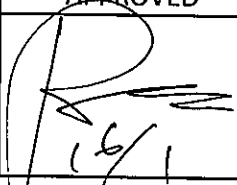
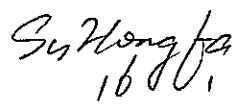
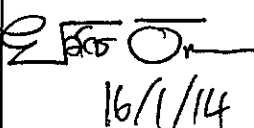
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SPECIFICATION

STYLE	80°C 300V HOOK-UP WIRE
SIZE	UL 1007 (16, 18, 20, 22 AWG)
APPROVAL MARK	UL CUL -F-
FILE No.	E150612
P/N	E07X X TS101
DATE	15/01/2014
EDITION	1.1

CUSTOMER APPROVE

DATE

APPROVED	QA REVIEWED	R&D REVIEWED	PREPARED
			Kornrada 15/01/2014



UL 1007, 1569 Hook-up Wire

80° C, 105° C 300 V

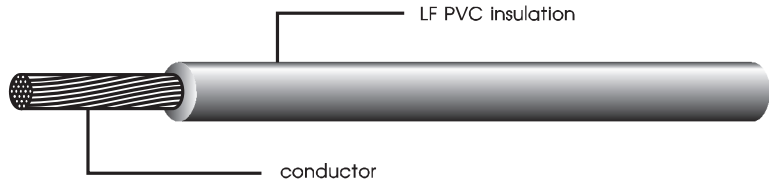
Applications:

- For general purpose internal wiring of electronic and electrical equipment

Construction:

Product Description:

- Tinned, (stranded or solid) copper conductor, or OS-1, 30-16 AWG
- Rating : UL 1007 80°C 300 V
UL 1569 105°C 300 V
- Pass UL VW-1& CSA FT1 flame test. OS-1 is available
- Uniform thickness of wire to ensure easy stripping and cutting.
- Resistant to acids, oils, alkalines, moisture and fungus.
- Insulation : PVC / LF UL1007



UL Style & CSA Type	Conductor		Insulation Thickness mm	Overall Diameter (Approx) mm	Standard Put-Up		Conductor Resistance at 20° C ohm/kft
	AWG	No./mm			ft/coil	M/coil	
UL 1569 UL 1007 CSA TR-64 (Stranded)	30	7/0.102	0.38	1.10	11500	3500	114.40
	28	7/0.127		1.20	11500	3500	72.00
	26	7/0.160		1.30	10000	3050	45.20
	24	11/0.160		1.40	2000	610	29.30
	22	17/0.160		1.60	2000	610	16.70
	20	21/0.180		1.80	2000	610	10.50
	18	34/0.180		2.10	2000	610	6.64
	16	26/0.253		2.40	2000	610	4.18
UL 1569 UL 1007 CSA TR-64 (OS-1)	26	7/0.160		1.30	2000	610	42.60
	24	7/0.203		1.45	2000	610	26.20
	22	7/0.253		1.60	2000	610	16.70
	20	7/0.320		1.80	2000	610	10.40
	18	7/0.404		2.10	2000	610	7.06
	16	7/0.488		2.30	2000	610	4.82
UL 1569 UL 1007 CSA TR-64 (Solid)	26	1/0.404		1.25	2000	610	43.53
	24	1/0.511		1.35	2000	610	27.25
	22	1/0.643	1.50	2000	610	16.50	
	20	1/0.813	1.65	2000	610	10.30	
	18	1/1.024	1.85	2000	610	6.52	
	16	1/1.290	2.15	2000	610	4.10	



1. SCOPE

This specification base on UL(UL758) and CSA(C22.2 No.210) standard.
Hook-up wire for internal wiring of electronic and electrical equipment.
All the parts, materials and products conform to RoHS and REACH regulation.

80°C 300V
HOOK-UP WIRE
UL 1007 (16, 18, 20, 22 AWG)

2.CONSTRUCTION

PART No.		UNIT	E0716TS101	E0718TS101	E0720TS101	E0722TS101
CONDUCTOR	SIZE	—	16 AWG	18 AWG	20 AWG	22 AWG
	MATERIAL	—	TCU TINNED STRANDED COPPER			
	CONDUCTOR	No./MM	26/0.253 ± 0.008	34/0.180 ± 0.008	21/0.180 ± 0.008	17/0.160 ± 0.008
INSULATION	THICKNESS (nom)	MM	0.39	0.39	0.39	0.39
	THICKNESS (min)	MM	0.34	0.34	0.34	0.34
	DIAMETER	MM	2.40 ± 0.08	2.10 ± 0.08	1.80 ± 0.08	1.60 ± 0.08
	MATERIAL	—	LEAD FREE PVC			
	COLOR	—	BLACK OR OTHER COLOR			



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P/N E07XXTS101 REV. 1.1 (PAGE 3/3)

3. CHARACTERISTICS

ITEM		16 AWG	18 AWG	20 AWG	22 AWG
RATING TEMP & VOLTAGE		80°C 300V			
CONDUCTOR RESISTANCE (OHM/KM/20°C MAX.)		14.6	23.2	36.7	59.4
INSULATION RESISTANCE (IN WATER)		0.75 MEGA OHM/KM/15°C (MINIMUM)			
DIELECTRIC STRENGTH		AC 2 KV/MINUTE (NO BROKEN)			
SPARK TEST		5 KV	5 KV	4 KV	4 KV
INSULATION	UNAGED	TENSILE STRENGTH	1,500 PSI (1.05 Kg/mm ²) (MINIMUM)		
		ELONGATION	100 % (MINIMUM)		
	AGED	TENSILE STRENGTH	UNAGED MIN. 70% (113±1°C x 168 HRS)		
		ELONGATION	UNAGED MIN. 65% (113±1°C x 168 HRS)		
DEFORMATION TEST		50% (MAXIMUM) (121±1°C x 1 HR)			
HEAT SHOCK TEST		121±1°C x 1 HR (NO CRACK)			
COLD BEND TEST		-10±1°C x 1 HR (NO CRACK)			
FLAME TEST		VW-1 (PASS)			

4. MARKING

UL AWM 1007 XXAWG VW-1 80°C 300V E150612 THAI WONDERFUL **UL** AWM I A TR-64 FT1 90°C XXAWG -F- (LF)

Remark : XX = Size of wire

5. CROSS-SECTION OF CABLE

