




SPECIFICATION

FOR

LEAD FREE MULTI CORE CABLE

[P/N: UL2464 (SPV1537) nx17AWG(50/0.18TA) LF]

(n ~ number core)

Prepared	Checked	Approved
		

Revision record

[illegible]

1. Scope

This specification covers UL recognized multi core cable.

USE: Internal wiring or external interconnection of electronic equipment.

Rating temperature: 80°C

Rating voltage: 300V

2. Applicable standard

UL 758 [Latest version]

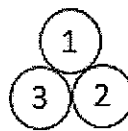
UL AWM Style 2464

3. Construction and Material

Description			Specification	
			2x17AWG	3x17AWG
Conductor	Material	-	Tinned annealed copper wire (TA) stranded	
	Size	AWG	17	
	Stranding	No./mm	50/0.18	
	Diameter (Nom.)	mm	1.47	
Insulation	Material	-	Semi-rigid, Lead free PVC	
	Thickness (Nom.)	mm	0.41	
	Diameter (Nom.)	mm	2.29	
	Color & Identification	-	1. Black; 2. Brown; 3. Red	
Cabling	Binder tape	-	Paper tape	
	Diameter (Nom.)	mm	4.70	5.05
Jacket	Material	-	Heat resistance, Lead free PVC	
	Thickness (Nom.)	mm	0.81	
	Diameter	mm	6.3 ± 0.5	6.7 ± 0.5
	Color (color code)	-	Black (BK)	



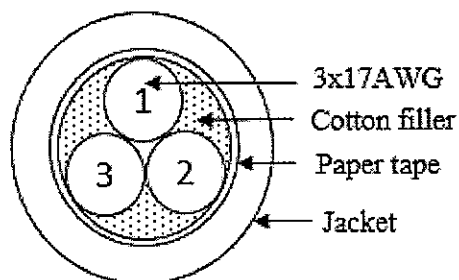
Cabling 2 cores



Cabling 3 cores

Fig. 1 Lay out of cabling

Example: item 3x17AWG



(*) Suitable fillers may be applied to make a circular cross section.

Fig. 2 Cross-section of cable

4. Marking

The completed cable shall be printed following marking format on the surface throughout entire length by regular interval.

Example:

AWM E41447-HCV STYLE 2464 80C VW-1 HITACHI LF

Note: Making format subject to change without notice according with safety revision

5. Properties

No.	Test Item	Test Detail	Standard	Test		
				Routine	Type	Approval
1	Dielectric strength	A.C.2000V/1min; No breakdown	Specification	Yes	X	Yes
2	Jacket tensile strength (unaged)	Min 10.3 MPa	UL	X	Yes	Yes
3	Jacket tensile strength (aged) ^(*)	Min 70% (aged at 113±2°C, 168 hours)	UL	X	Yes	Yes
4	Jacket elongation (unaged)	Min 100 %	UL	X	Yes	Yes
5	Jacket elongation (aged) ^(*)	Min 45% (aged at 113±2°C, 168 hours)	UL	X	Yes	Yes
6	Heat shock	No crack (at 121±1°C, 1 hour)	UL	X	Yes	Yes
7	Cold bend	No crack (at -10±2°C, 4 hours)	UL	X	Yes	Yes
8	Deformation	Max. 50% ^(**) (3.93N at 121±1°C)	UL	X	Yes	Yes
9	Insulation resistance	Min. 10 MΩ-km (20°C)	Specification	X	Yes	Yes
10	Conductor resistance	Max. 15.0 Ω/km (20°C)	Specification	X	Yes	Yes
11	Current ampacity ^(***)	2x17AWG	Specification	-	-	-
		3x17AWG				
12	Flame test	VW-1	UL	X	Yes	Yes

^(*) % of the unaged specimen

^(**) % of decrease in thickness

^(***) Current ampacity at ambient temp.40°C, max. conductor temp.80°C, in case of single cable in air

6. Packing

6.1 Packing

Each product shall be packed in coil for transportation, and unit length: 100m

6.2 Marking on the Package

Each package shall be tagged to show the following information

- | | |
|---------------------|--|
| (1) UL Style No. | (8) File No. |
| (2) Conductor size | (9) Rating temperature |
| (3) No of conductor | (10) Rating voltage |
| (4) Color | (11) Date of manufacturing |
| (5) Lot No. | (12) Insulation thickness and material |
| (6) Length | (13) Jacket thickness and material |
| (7) Use | (14) Name of manufacturer |

