

SPECIFICATION

FOR




LEAD FREE MULTI CORE CABLE

[P/N: CO-VV (SPV1097) nx1.25SQ(50/0.18TA) LF]

(n ~ number core)

Provisional Document

(Note) Official document shall be issued after 1st trial and evaluation

Prepared	Checked	Approved
		

Form No. HCV0400

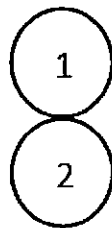
1. Scope

This specification covers lead free PVC insulated and jacketed multi core cables.

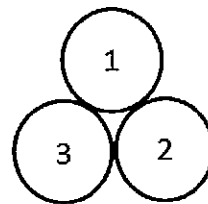
Rating: 80°C, 300V

2. Construction and Material

Description			Specification	
			2x1.25SQ	3x1.25SQ
Conductor	Material	-	Tinned annealed copper wire (TA) stranded	
	Size	SQ	1.25	
	Stranding	No./mm	50/0.18	
	Diameter (Nom.)	mm	1.47	
Insulation	Material	-	Heat resistant, 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 (Nom.)	mm	6.3 ± 0.5	6.7 ± 0.5
	Color (color code)	-	Black (BK)	



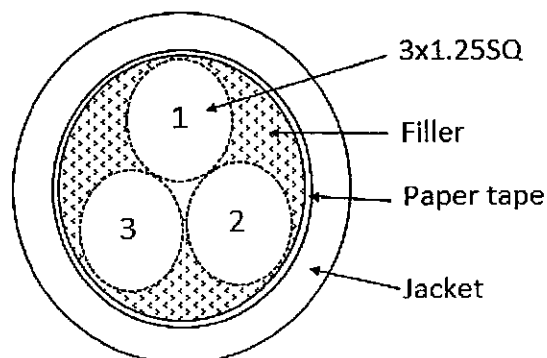
Cabling 2 core



Cabling 3 core

Fig. 1 Lay out of cabling

Example: item 3x1.25SQ



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

Fig. 2 Cross-section of cable

3. Marking

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

Example:

HITACHI Manufacture year

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

4. Properties

No.	Test Item	Test Detail	Standard	Test		
				Routine	Type	Approval
1	Dielectric strength	AC 2000V/1min, No breakdown	Specification	Yes	X	Yes
2	Conductor resistance	Max. 15.0 Ω /km at 20°C	Specification	X	Yes	Yes
3	Insulation resistance	Min 10 M Ω -km (20°C)	Specification	X	Yes	Yes
4	Current rating	Max. 14.7 A	Specification	X	X	Yes

5. Packing

5.1 Packing

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

5.2 Marking on the Package

Each package shall be tagged to show the following information

- | | |
|---------------------|---------------------------|
| (1) Production name | (5) Lot No. |
| (2) Conductor size | (6) Length |
| (3) No of conductor | (7) Date of manufacturing |
| (4) Color | (8) Name of manufacturer |

6. Order form

Example:

CO - VV (SPV1097) 3 x 1.25SQ(50/0.18TA) LF BK C100
 1 2 3 4 5 6 7 8

1	CO	For Computer
2	VV	PVC insulation and jacket
3	SPV1097	Specification No. SPV-02-1097
4	3	No of core
5	1.25SQ(50/0.18TA)	Conductor size & stranding
6	LF	Lead Free
7	BK	Jacket Color (Black)
8	C100	Packing style and unit length, "C" for coil in m

7. Control of Chemical Substances

Control of Chemical Substances in this product shall be controlled as below.

7.1 6 substances of RoHS Directive

(1) Applicable standard and statute

(a) Directive 2011/65/EU of the European Parliament and of the Council on the Restriction of the use of certain Hazardous Substances in electrical and electronic equipment)

(b) 2005/618/EC COMMISSION DECISION of 18 August 2005

(amending Directive 2011/65/EU of the European Parliament and of the Council for the purpose of establishing the maximum concentration values for certain hazardous substances in electrical and electronic equipment)

(c) JIS C 0950:2008(The marking for presence of the specific chemical substances for electrical and electronic equipment)

(2) The maximum concentration values for certain hazardous substances.

	Chemical Substances	Concentration value	
		Resin, a paint, and ink	Others
1	Cadmium and Cadmium Compounds	Less than 5ppm	Less than 75ppm
2	Hexavalent Chromium Compounds	Less than 1000ppm	
3	Lead and Lead Compounds	Less than 100ppm	Less than 1000ppm
4	Mercury and Mercury Compounds	Less than 1000ppm	
5	Polybrominated Biphenyls(PBBs)	Less than 1000ppm	
6	Polybrominated Diphenyl ethers(PBDEs)	Less than 1000ppm	
7	Bis (2-ethylhexyl) phthalate (DEHP) * 1 (CAS No.117-81-7)	Intentional use prohibited * 2	
8	Benzyl butyl phthalate (BBP) * 1 (CAS No. 85-68-7)	Intentional use prohibited * 2	
9	Dibutyl phthalate (DBP)(CAS No. 84-74-2) * 1	Intentional use prohibited * 2	
10	Diisobutyl phthalate (DIBP) * 1 (CAS No. 84-69-5)	Intentional use prohibited * 2	

*1 : COMMISSION DELEGATED DIRECTIVE (EU) 2015/863

*2 : Provisional until the guarantee of material (up to 1000ppm) is obtained

7.2 Any substances of Hitachi Metals, Limited Cable Material Company's voluntarily controlled chemical substances.

(1) Applicable Standard

Cable Materials Company Green Procurement Standard; document No. HKS01 (Latest version), Level A Prohibited Substances Group List.

(2) Maximum concentration value.

Intentional use shall be prohibited and maximum concentration value limited according to each substance. 6 substances of the clause 7.1 shall be controlled as 7.1 (2).

HKS01 Perform the adapted management to quote laws and regulations of HKS01 (Latest version).