




# SPECIFICATION




## FOR

LEAD FREE PVC INSULATED AND JACKETED CABLE

[ P/N: CO-VV (SPV1644) 10x0.3SQ(17/0.16TA) LF]

Prepared	Checked	Approved
		

## Revision record

No.	Date	Rev.	Contents	Prepared by	Reviewed by	Approved by
1	Feb. 06 <sup>th</sup> , 2020	Initial Issue	Initial Issue	 Kien NT	 Cuong NM	 Suzuki M

## 1. Scope

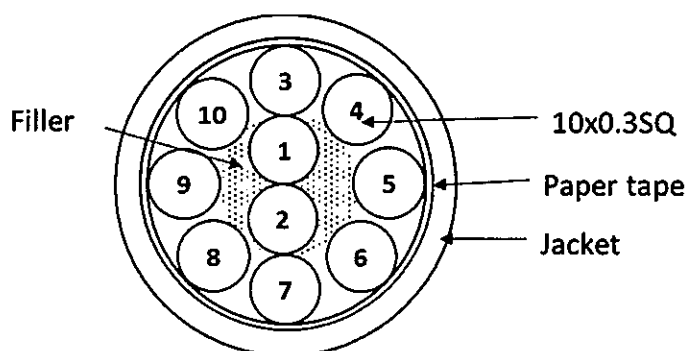
This specification covers lead free PVC insulated and jacketed cables.

Rating Temperature: 80°C

Rating Voltage: 30V

## 2. Construction and Material

Description			Specification
Conductor	Material	-	Tinned annealed copper wire (TA) stranded
	Size	SQ	0.3
	Stranding	No./mm	17/0.16
	Diameter (Nom.)	mm	0.76
Insulation	Material	-	Semi-Rigid, Lead free PVC
	Thickness (Nom.)	mm	0.25
	Diameter (Nom.)	mm	1.26
	Color & Identification	-	See table 1
Cabling	Binder tape	-	Paper tape
	Diameter (Nom.)	mm	5.2
Jacket	Material	-	Heat resistance, Lead free PVC
	Thickness (Nom)	mm	0.6
	Diameter	mm	6.4 ± 0.5
	Color (color code)	-	Black (BK)



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

**Fig. 1 Cross-section of cable**

## 3. Marking

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

**HITACHI** Manufacture year

*Note: Marking 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	A.C. 2000V/1min; No breakdown	Specification	Yes	X	Yes
2	Conductor resistance	Max. 65.7 Ω/km at 20°C	Specification	X	Yes	Yes
3	Insulation resistance	Min. 10 MΩ-km (20°C)	Specification	X	Yes	Yes

**5. Packing****5.1 Packing**

Each product shall be packed in coil for transportation, and unit length: 200m.

**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 (SPV1644) 10x0.3SQ(17/0.16TA) LF BK C200  
           1      2          3                                  4          5      6      7

1	CO	For Computer
2	VV	PVC insulation and jacket
3	SPV1644	Specification No. SPV-02-1644
4	10x0.3SQ(17/0.16TA)	No. of core x Conductor size & stranding
5	LF	Lead Free
6	BK	Jacket Color (Black)
7	C200	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.

10 substances of RoHS Directive

**(1) Applicable standard and statute**

- 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)
- 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)
- 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)	Less than 1000ppm	
8	Benzyl butyl phthalate (BBP) * 1(CAS No. 85-68-7)	Less than 1000ppm	
9	Dibutyl phthalate (DBP)(CAS No. 84-74-2) * 1	Less than 1000ppm	
10	Diisobutyl phthalate (DIBP) * 1(CAS No. 84-69-5)	Less than 1000ppm	

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

**Table 1 : Color & Identification**

Core No.	Color	Core No.	Color
1	Black	6	Brown
2	White	7	Blue
3	Red	8	Orange
4	Green	9	Gray
5	Yellow	10	Violet