

No. SP24-31-0931

Date August 23, 2024

# SPECIFICATION

FOR

## 600V FLEXIBLE CABLE

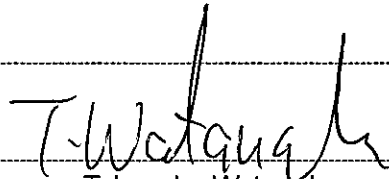
Code : 600V CUR-2PECT-SB 7×4mm<sup>2</sup>(NMB)

*Quantity*

*Your Ref. No.*

*Our Ref. No.*

*Signed by*



Takanobu Watanabe

Manager

*Engineering Dept. I*  
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# Proterial, Ltd.

Issue and revision record

Rev. No	Issue date	Item	Prepared by	Reviewed by	Approved by
-	August 23, 2024	First issue	<i>K. Yamane</i> K.Yamane	<i>N. Ono</i> N.Ono	<i>T. Watanabe</i> T.Watanabe

## 1. Scope

This specification covers 600V Flexible Cable, which is reference to Japanese Electrical Appliance and Material Safety Law and Manufacturer's Standard.

## 2. Construction and Materials

### 2.1 Conductor

Conductor shall be stranded flexible conductor consisting of tinned annealed copper wires. A suitable separator tape shall be applied over the conductor.

### 2.2 Insulation

Insulation shall consist of ethylene propylene rubber compound.

Nominal thickness shall be shown in the attached table 1.

Ave. thick. : not less than 90% of the nominal thickness

Min. thick. : not less than 80% of the nominal thickness

### 2.3 Core identification

The core identification shall be made by the number printed on insulation as shown in the attached figure 2.

### 2.4 Cabling cores

The insulated conductors shall be cabled.

Suitable fillers and binder may be applied at manufacturer's discretion, if necessary.

### 2.5 Braided shield

Braided shield shall consist of tinned annealed copper wire.

A suitable tape shall be applied over the Braided shield.

### 2.6 Sheath

Sheath shall consist of original rubber compound.

Nominal thickness shall be shown in the attached table 1.

Ave. thick. : not less than 90% of the nominal thickness

Min. thick. : not less than 85% of the nominal thickness

### 2.7 Dimension

The dimension of the cable shall be in accordance with the attached table 1.

## 3. Marking

Manufacturer's name and year of manufacture shall be marked by suitable methods.

#### 4. Inspection

Inspection shall be made on the following items prior to shipment.

Properties	Standard to comply with	Requirements	Test interval
Construction and dimensions	JIS C 3005 4.3	To comply with clause 2 and the attached table 1	Every shipment
Withstand voltage test	JIS C 3005 4.6	To withstand AC 3000V for 1 min.	
Conductor resistance	JIS C 3005 4.4	Not more than the value in the attached table 2	First shipment
Insulation resistance	JIS C 3005 4.7	Not less than the value in the attached table 2	

#### 5. Guide to use

This cable is designed for curtain style method as shown below.

##### 1. **Curtain style method (Festoon method)**

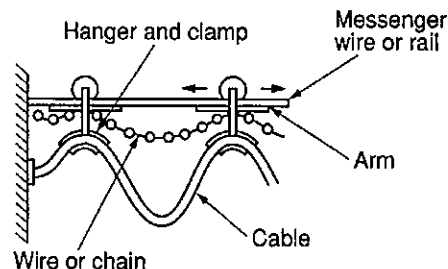


Table 1 : Dimensions

{ Code : 600V CUR-2PECT-SB 7×4mm<sup>2</sup>(NMB) }

Item	Unit	Specified Value
No. of conductor	—	7
Conductor	Nom. cross-section area	mm <sup>2</sup>
	Construction	No./mm
	Approx. diameter	mm
Nominal thickness of insulation	mm	1.0
Approx. thickness of braided shield	mm	0.45
Nominal thickness of sheath	mm	2.5
Approx. diameter of completed cable	mm	23.5
Max. diameter of completed cable	mm	24.7
Approx. weight of completed cable	kg/km	725

Table 2 : Characteristic

Item	unit	Specified Value
No. of conductor	—	7
Conductor nominal cross-section area	mm <sup>2</sup>	4
Max. conductor resistance at 20°C	Ω/km	5.09
Min. insulation resistance at 20°C	MΩ-km	400
Permissible minimum bending radius	mm	150

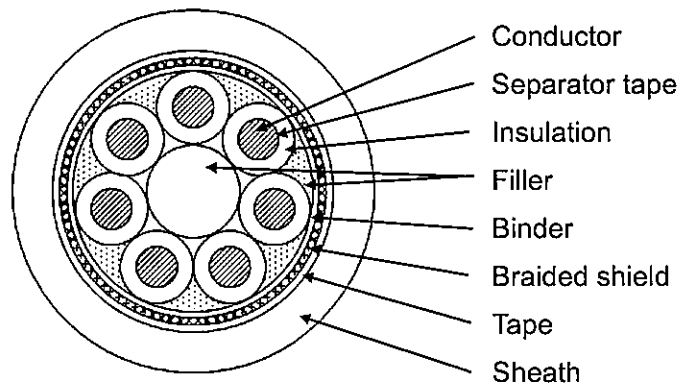


Fig.1 Cable cross section

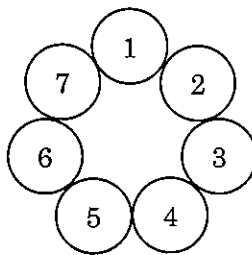


Fig.2 Core identification