No. SP25-31-0968
Date March 31, 2025

SPECIFICATION

FOR

600V FLEXIBLE CABLE

Code : 600V CUR-2PECT-PSB

Quantity

Your Ref. No.

Our Ref. No.

Signed by T. Watanabe

Takanobu Watanabe
Manager

Engineering Dept. I
Electric Wire & Cable Business Unit

Proterial, Ltd.

Issue and revision record

REV. No.	Issue date	Item	Prepared by	Reviewed by	Approved by
—	March 31, 2025	FIRST ISSUE	K. Yamane	N. Ono	T. Watanabe

1. Scope

This specification covers 600V Flexible Cable, which is reference to Japanese Electrical Facility Regulation and Manufacturers 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.
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 color of insulation surface. (Fig. 2)

2.4 Pair twisting

Two insulated conductors (Black core and White core) shall be twisted together with suitable filler and binder tape.

2.5 Pair identification

The pair identification shall be made by numbering of the binder tape. (Fig. 2)

2.6 Braided shield

Braided shield consisting of tinned annealed copper wires shall be applied over the pair twisting.
A suitable tape shall be applied over the Braided shield.

2.7 Cabling of cores

Each pairs shall be cabled.
Suitable filler and suitable binder may be applied at manufacturer's discretion, if necessary.

2.8 Sheath

Sheath shall consist of original rubber compound.
Nominal thickness shall be shown in the attached table.
Ave. thick : not less than 90% of the nominal thickness
Min. thick : not less than 85% of the nominal thickness

2.9 Dimension

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

3. Marking

Manufacture'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.	First shipment
Conductor resistance	JIS C 3005 4.4	Not more than the value in the attached table 2	
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.

Curtain style method (Festoon method)

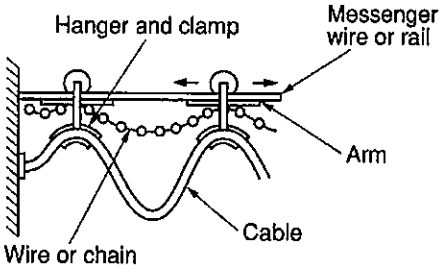

Table1 : Dimensions

(Code : 600V CUR-2PECT-PSB)

Item		Unit	Value			
No. of conductor		—	4P (8)	7P (14)	10P (20)	12P (24)
Conductor	Nominal cross-section area	mm^2	1.5	1.5	1.5	1.5
	Construction	No. ／mm	30/0.25	30/0.25	30/0.25	30/0.25
	Approx. diameter	mm	1.6	1.6	1.6	1.6
Nominal thickness of insulation		mm	0.8	0.8	0.8	0.8
Nominal thickness of braided shield		mm	0.3	0.3	0.3	0.3
Nominal thickness of sheath		mm	2.5	3.0	3.3	3.4
Approx. diameter of completed cable		mm	24	32	38	39
Maximum diameter of completed cable		mm	25.2	33.6	39.9	41.0
Approx. weight of completed cable		kg／km	580	995	1370	1550

Table.2 Characteristic

Item	Unit	Value			
No. of conductor	-	4P (8)	7P (14)	10P (20)	12P (24)
Conductor nominal cross-section area	mm^2	1.5	1.5	1.5	1.5
Maximum conductor resistance at 20℃	Ω／km	13.7	13.7	13.7	13.7
Minimum insulation resistance at 20℃	MΩ·km	500	500	500	500
Permissible minimum bending radius	mm	150	200	230	240

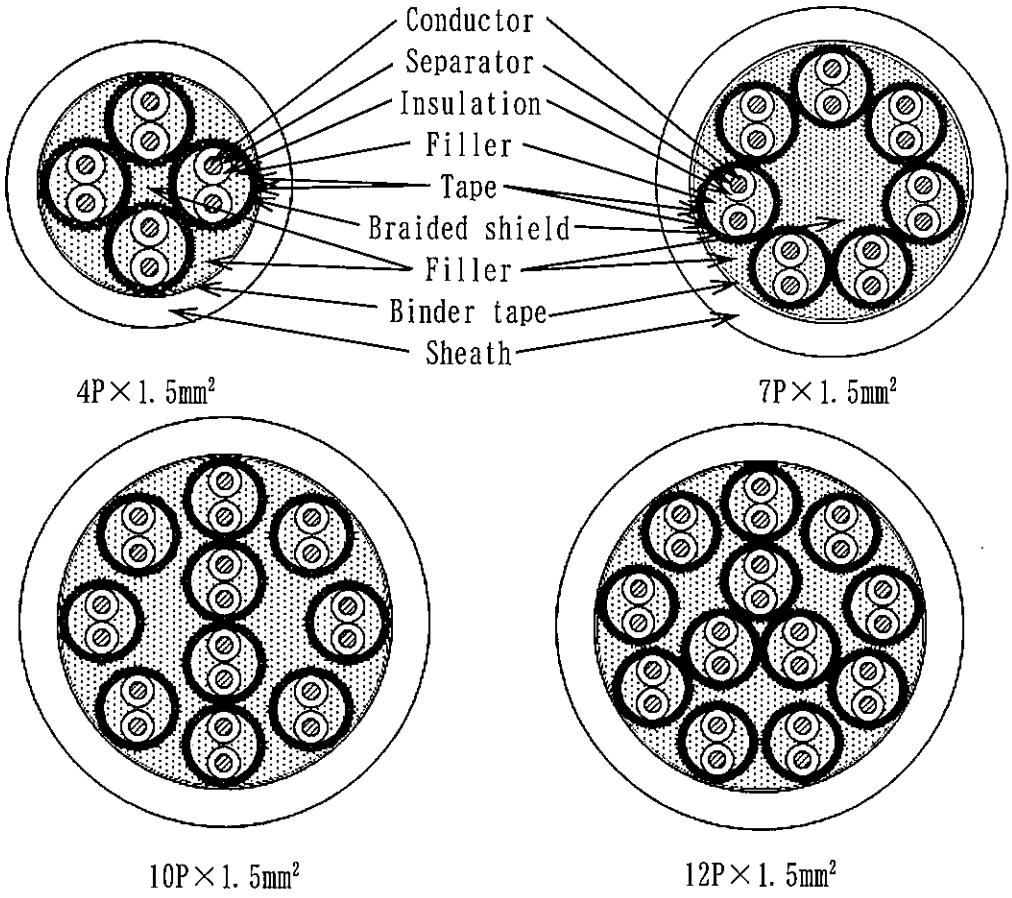

Fig. 1 Cable cross section

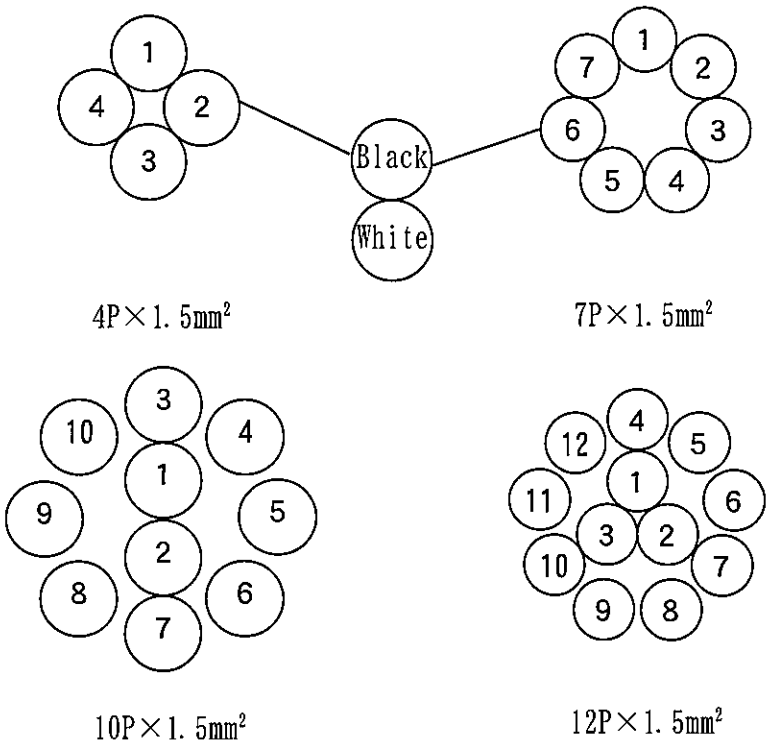

Fig. 2 Core identification