

No. SP18-31-0578

Date May 12, 2023

SPECIFICATION

FOR

0.6/1KV FLEXIBLE CABLE

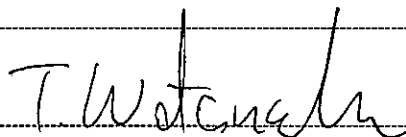
Code : 0.6/1KV RE-PNCT 4X16mm²

Quantity

Your Ref. No.

Our Ref. No.

Signed by



Takanobu Watanabe

Manager

Engineering Dept. I
Electric Wire & Cable Division

Proterial, Ltd.

Issue and revision record

Rev. No	Issue date	Item	Prepared by	Reviewed by	Approved by
-	May. 2, 2018	First issue	<i>K. Yamane</i> K.Yamane	<i>N. Ono</i> N.Ono	<i>K. Fukuzato</i> K.Fukuzato

1. Scope

This specification covers 0.6/1kV Flexible Cable, which is based on VDE0250-814, Japanese Electrical Facility Regulation and Manufacturer's Standard.

2. Construction and Materials

2.1 Conductor

Conductor shall be stranded flexible conductor consisting of tinned annealed copper wires. 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 the nominal thickness

Min. thick : not less than 90%-0.1mm of the nominal thickness

2.3 Cabling of cores

Each insulated conductors shall be cabled together with a central tension member.

2.4 Sheath

Sheath shall consist of our 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

A straight line shall be marked on the surface of the sheath.

2.5 Reinforcement

Reinforcement consisting of cotton twines shall be applied in the middle of the sheath.

2.6 Dimension

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

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.

- (1) Construction and dimensions
- (2) Conductor resistance
- (3) Withstand voltage test
- (4) Insulation resistance

Table 1 : Dimensions and electrical properties

(Code : 0.6/1KV RE-PNCT 4X16mm²)

Item		Unit	Specified value
Conductor	No. of conductor	-	4
	Size	mm ²	16
	Construction	No./mm	7/18/0.4
	Approx. diameter	mm	5.9
Nominal thickness of insulation		mm	1.2
Nominal thickness of reinforcement		mm	1.0
Nominal thickness of sheath		mm	2.9
Approx. diameter of completed cable		mm	28.4
Maximum diameter of completed cable		mm	29.9
Approx. weight of completed cable		kg/km	1220
Max. conductor resistance(20°C)		Ω/km	1.24
Withstand voltage		V/min.	2500/5
Min. insulation resistance(20°C)		MΩ · km	400
Permissible minimum bending radius		mm	290
Permissible maximum pulling tension *		kN	2.4
Permissible maximum compression force **		kN/m	2.9

* In any case, pulling tension and compression force must not exceed these value.
 For safety, regular pulling tension should be 1/3 of the permissible maximum value.
 It is necessary to determine the pulling tension considering the compression force.

** Compression force = Pulling tension / Bending radius

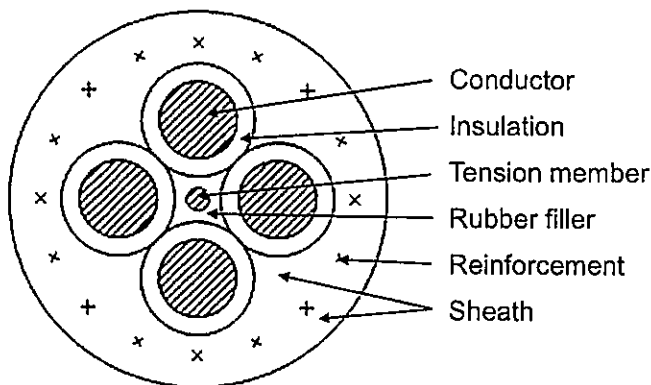


Fig.1 Cable cross section

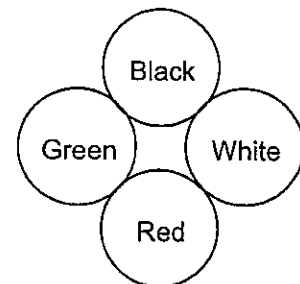


Fig.2 Core identification