

SPECIFICATION**For****FHC**

Hard-drawn Copper Stranded Conductor

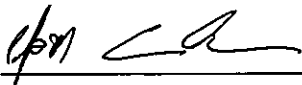
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CUSTOMER

Rev.	Date	Description
0	07/10/2019	Issued specification

Customer Document	Rev.

Remark:

This document is based on the Customer Document for the structure and properties of electric wire and cable only. If there are different points, will be shown in deviation table.

1. Scope

This specification covers bare hard drawn concentric-lay stranded copper conductor for general use for electrical purposes.

The conductor shall be in accordance with TIS 64-2517.

(TIS 64-2517 : Standard For Hard Drawn Copper conductor For Overhead Lines)

2. Component Wire

The component wire shall be hard-drawn copper wire for electrical purposes in accordance with TIS 64-2517.

The wire shall be clean, smooth and free from harmful defects.

3. Stranded conductor

The conductor shall be concentrically stranded uniformly and closely.

The direction of lay shall be reversed in successive layers and right-hand (Z) lay in the outermost layer.

4. Test and Properties

The test and properties of the conductors shall be carried out in accordance with TIS 64-2517.

5. Packing

The conductors shall be placed on non-returnable wooden reels.

The reels shall be covered with suitable covering to provide the conductors with physical protection during transportation and during ordinary storage and handling operation.


Each reel shall be clearly marked as follows.

1. Designation "FHC"

2. Size of conductor

3. Cable length

4. Net and gross weight

5. Manufacturer's name and/or trade mark "  **YAZAKI** "

6. Rolling direction of reel

Test and Inspection

Sample Tests

- Maximum conductor resistance, Ohm/kmspecified in Table 1
- Constructions.....specified in Table 1

Definition concerning the tests

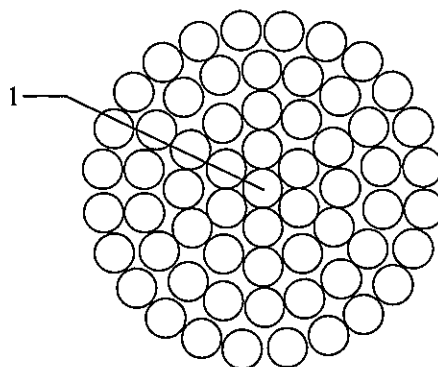
Routine tests: Tests made by the manufacturer on each manufactured length of cable to check that each length meets the specified requirements.

Sample tests: Tests made by the manufacturer on samples of completed cable or components taken from a completed cable, at a specified frequency, so as to verify that the finished product meets the specified requirements.

Type tests: Tests made before supplying, on a general commercial basis, a type of cable covered by this standard, in order to demonstrate satisfactory performance characteristics to meet the intended application.

Cable structure

Cross-sectional (Not scale)



No.	Structure	Material
1	Copper wire	Hard-drawn copper

Application: For overhead transmission and distribution line, ground conductor.

Table 1

Nominal size (mm ²)	Conductor strands (No./mm)	Conductor diameter approx. (mm)	Conductor resistance at 20°C maximum (Ohm/km)	Weight approx. (kg/km)	Standard length (m)
10	7/1.35	4.05	1.80548	90	2000
16	7/1.70	5.10	1.13857	140	2000
25	7/2.14	6.42	0.71851	230	2000
35	7/2.52	7.56	0.51815	320	2000
50	7/3.02	9.06	0.35896	450	2000
50	19/1.78	8.90	0.38252	430	2000
70	19/2.14	10.70	0.26466	600	2000
95	19/2.52	12.60	0.19183	850	2000
120	19/2.85	14.25	0.14922	1100	1000
150	37/2.25	15.75	0.12384	1300	1000
185	37/2.52	17.64	0.09873	1700	1000
240	61/2.25	20.25	0.07528	2200	500
300	61/2.52	22.68	0.06002	2800	500
400	61/2.85	25.65	0.04692	3600	500
500	61/3.20	28.80	0.03703	4500	500