JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

JIS C 3002 : 2025

(JSA)

Testing methods of electrical copper and aluminium wires

ICS 29.060.10

Reference number: JIS C 3002 : 2025 (E)

Date of Establishment: 1950-07-15

Date of Revision: 2025-02-20

Date of Public Notice in Official Gazette: 2025-02-20

Investigated by: Japanese Standards Association

JIS C 3002 : 2025, First English edition published in 2026-01

Translated and published by: Japanese Standards Association
Mita Avanti, 3-11-28, Mita, Minato-ku, Tokyo, 108-0073 JAPAN

In the event of any doubts arising as to the contents,
the original JIS is to be the final authority.

Printed in Japan HN

Contents

Page

Foreword

This Japanese Industrial Standard has been revised by the Minister of Economy, Trade and Industry based on the provision of Article 14, paragraph (1) of the Industrial Standardization Act applied mutatis mutandis pursuant to the provision of Article 16 of the said Act in response to a proposal for revision of Japanese Industrial Standard with a draft being attached, submitted by Japanese Standards Association (JSA), an accredited standards development organization. This edition replaces the previous edition (**JIS C 3002** : 1992), which has been technically revised.

Attention is drawn to the possibility that some parts of this Standard may conflict with patent rights, published patent application or utility model rights. The relevant Minister is not responsible for identifying any of such patent rights, published patent application or utility model rights.

Testing methods of electrical copper and aluminium wires

1 Scope

This Japanese Industrial Standard specifies testing methods of electrical copper wires and electrical aluminium wires (hereafter referred to as the “copper wires” and “aluminium wires” respectively).

2 Normative references

Part or all of the provisions of the following standards, through reference in this text, constitute provisions of this Standard. The most recent editions of the standards (including amendments) indicated below shall be applied.

JIS B 7502 *Micrometers*

JIS B 7507 *Geometrical product specifications (GPS) — Dimensional measuring equipment — Vernier, dial and digital callipers*

JIS B 7516 *Metal rules*

JIS B 7721 *Tension/compression testing machines — Calibration and verification of the force-measuring system*

JIS B 7741 *Calibration of extensometer systems used in uniaxial testing*

JIS K 8085 *Ammonia solution (Reagent)*

JIS K 8088 *Sulfur (Reagent)*

JIS K 8180 *Hydrochloric acid (Reagent)*

JIS K 8252 *Ammonium peroxodisulfate (Reagent)*

JIS K 8949 *Sodium sulfide nonahydrate (Reagent)*

JIS K 8984 *Copper (II) sulfate (Reagent)*

3 Terms and definitions

For the purpose of this Standard, the following terms and definitions apply.

3.1

loosening of stranding

the condition where the strands of a stranded wire unwind, loosen, or splay out

3.2

S strand

a stranded wire in which the direction of strand of the component wires is as shown in Figure 1 a)