



JAPANESE
INDUSTRIAL
STANDARD

Translated and Published by
Japanese Standards Association

 **JIS C 3104** : 1994
(Reaffirmed in 2000)

Rectangular copper wires for electrical purposes

ICS 29.060.10

Descriptors : rectangular shape, electric conductors, electric wires, copper

Reference number : JIS C 3104 : 1994 (E)

C 3104 : 1994

Foreword

This translation has been made based on the original Japanese Industrial Standard revised by the Minister of International Trade and Industry through deliberations at the Japanese Industrial Standards Committee in accordance with the Industrial Standardization Law:

Date of Establishment: 1953-03-28

Date of Revision: 1994-07-01

Date of Reaffirmation: 2000-06-20

Date of Public Notice in Official Gazette: 2000-06-20

Investigated by: Japanese Industrial Standards Committee

Divisional Council on Electricity

JIS C 3104:1994, First English edition published in 2001-01

Translated and published by: Japanese Standards Association
4-1-24, Akasaka, Minato-ku, Tokyo, 107-8440 JAPAN

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

© JSA 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from the publisher.

Printed in Japan

Rectangular copper wires for electrical purposes

1 Scope This Japanese Industrial Standard specifies rectangular copper wires for electrical purposes, hereafter referred to as "wires".

Remarks 1 The normative reference to this Standard is as follows.

JIS C 3002 *Testing methods of electrical copper and aluminium wires*

2 The units and numerical values given in { } in this Standard are in accordance with the traditional units and are appended for reference.

2 Class and symbol The class and symbol of the wire shall be as shown in Table 1.

Table 1 Class and symbol

Class	Symbol	Remarks
No. 1 Rectangular copper wire	H	Hard wire
No. 2 Rectangular copper wire	HA	Half hard wire
No. 3 Rectangular copper wire	A	Annealed wire
No. 4 Rectangular copper wire	SA	Annealed wire intended for edgewise bending

3 Characteristics The characteristics of the wire shall be as prescribed below, when tested in accordance with 7.

(1) **Tensile strength and elongation** The tensile strength and elongation of the wire shall comply with Table 2.

Table 2 Tensile strength and elongation

Thickness mm	Tensile strength MPa {kgf/mm ² }		Elongation %			
	No. 1 width		No. 2	No. 1	No. 2	No. 3 and No. 4
	Under 40 mm	40 mm and over				
0.5 or over to and excl. 2.0	373 min. {38.0} min.	275 min. {28.0} min.	275 to 373 {28.0 to 38.0}	0.4 min.	1.5 min.	30.0 min.
2.0 or over to and excl. 4.0	333 min. {34.0} min.		255 to 333 {26.0 to 34.0}	0.7 min.	2.0 min.	34.0 min.
4.0 or over to and excl. 6.0	304 min. {31.0} min.		245 to 304 {25.0 to 31.0}	1.2 min.	3.0 min.	36.0 min.
6.0 or over to and incl. 10.0	275 min. {28.0} min.					

(2) **Electric conductivity** The electric conductivity of the wire shall comply with Table 3.