INTERNATIONAL STANDARD

ISO 2574

Second edition 1994-06-01

Aircraft — Electrical cables — Identification marking

Aéronefs — Câbles électriques — Marquage d'identification

(https://standards.iteh.ai)
Document Preview

ISO 25741994

https://standards.iteh.ai/catalo.o/standards/iso/h8b3c39e-dca7-4997-875e-9a73b17e53c4/iso-2574-1994



Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 2574 was prepared by Technical Committee ISO/TC 20, Aircraft and space vehicles, Sub-Committee SC 1, Aerospace electrical requirements.

This second edition cancels and replaces the first edition (ISO 2574:1974), of which it constitutes a technical revision. 74 1994

https://standards.iteh.ai/catalog/standards/iso/h8h3c39e_dca7_4997_875e_9a73h17e53c4/iso_2574_1994

© ISO 1994

All rights reserved. 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.

International Organization for Standardization Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

Aircraft — Electrical cables — Identification marking

1 Scope

This International Standard specifies the way in which single-core, multi-core and coaxial cables used in the wiring of aircraft are to be marked as to type, size, origin, date, etc. in order to facilitate servicing, the investigation of faults and replacement, when necessary, with an equivalent cable. It also specifies the approved methods for the marking of cores. This International Standard supplements those relating to marking that already exist. It allows for the codification of manufacturer's identities by individual countries.

11en Standards (https://standards.iteh.ai)

2 Normative reference Document Preview

The following standard contains provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the edition indicated was valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent edition of the standard indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 3166:1993, Codes for the representation of names of countries.

3 Identification of cable

3.1 Because of variation in requirements for cable coverings, the minimum size of cable that can be marked will depend upon the overall diameter and should be stated in the national individual cable specification.

The marking shall consist of a legend printed in green or in a contrasting colour to that of the covering, using characters of the size required by the national standard, repeated at intervals of 300 mm \pm 50 mm, and containing the following information:

- name of cable or number of specification/standard, type and size (as specified in table 1);
- country of origin in accordance with the alpha-2 code specified in ISO 3166;
- manufacturer (one-letter code) in accordance with a code prepared by the standards organization in the country of origin;
- year of manufacture (one- or two-letter code) as specified in table 2.

Table 1 — Cable size code

| Nominal cross- sectional area | Size | code |
|----------------------------------|-----------------------|------|
| mm² | EN | AWG |
| 0,15 | 001 | 26 |
| 0,25 | 002 | 24 |
| 0,4 | 004 | 22 |
| 0,6 | 006 | 20 |
| 1 | 010 | 18 |
| 1,2 | 012 | 16 |
| 2 | 020 | 14 |
| 3 | 030 | 12 |
| 5 | 050 | 10 |
| 5 | 051 | 10 |
| 9 | 090 | 8 |
| 14 | 140 | 6 |
| 22 | 220 | 4 |
| 34 | 340 | 2 |
| 42 | 420 | 1 |
| 53 | 530 | 0 |
| 68 | 680 | 00 |
| 85 | 850 | 000 |
| (htt107s://s1 | tan ¹⁰⁷ ar | 0000 |

Table 2 — Year of manufacture code

nttps://standards.iteh.

| Year of manu- facture | Code indards/ | Year of manu- facture | 5 Code9 39e-do | Year of manu- facture | Code 375e-9 | n73b17e53c4/iso-2574-1994 |
|-----------------------------|------------------|-----------------------------|-------------------|-----------------------------|-----------------------|---------------------------|
| 1971 | J | 1986 | AA | 2001 | 01 | |
| 1972 | K | 1987 | AB | 2002 | 02 | |
| 1973 | L | 1988 | AC | 2003 | 03 | |
| 1974 | М | 1989 | AD | 2004 | 04 | |
| 1975 | N | 1990 | AE | 2005 | 05 | |
| 1976 | Р | 1991 | 91 | 2006 | 06 | |
| 1977 | R | 1992 | 92 | 2007 | 07 | |
| 1978 | S | 1993 | 93 | 2008 | 08 | |
| 1979 | Т | 1994 | 94 | 2009 | 09 | |
| 1980 | U | 1995 | 95 | 2010 | 10 | |
| 1981 | V | 1996 | 96 | 2011 | 11 | |
| 1982 | w | 1997 | 97 | 2012 | 12 | |
| 1983 | × | 1998 | 98 | 2013 | 13 | |
| 1984 | Y | 1999 | 99 | 2014 | 14 | |
| 1985 | Z | 2000 | 00 | 2015 | 15 | |

3.2 Dashes shall be used to separate the name of the cable or the number of the specification/standard, the type and the size.

This information shall be clearly separated from the codes for the country of origin and the manufacturer by a space equivalent to eight characters.

The codes for the country of origin and the manufacturer shall also be separated with a dash.

EXAMPLE

4 Marking of cores

Marking of cores shall be carried out by the cable manufacturer according to cable type as specified in the following subclauses.

4.1 Single-core cables (without screen or without screen and jacket)

The outer surface shall be marked in a permanent and legible manner.

4.2 Single-core cables (with screen and jacket)

The outer jacket shall be marked in a permanent and legible manner.

4.3 Multicore cables (without jacket)

The marking shall be carried out on:

- a) the white core if method 1A is used (see tables 3 and 6);
- b) the blue or red core if method 1B is used (see tables 4 and 6);
- c) the red core if method 1C is used (see tables 5 and 6);
- d) the white core if method 2 is used (see table 7); or) -dca7-4997-875-9a73b17-53c4/iso-2574-1994
- e) any core if method 3 is used (see 5.3).

4.4 Multicore cables (with jacket or with screen and jacket)

The marking shall be carried out optionally on the jacket or on:

- a) the white core if method 1A is used (see tables 3 and 6);
- b) the blue or red core if method 1B is used (see tables 4 and 6);
- c) the red core if method 1C is used (see tables 5 and 6);
- d) the white core if method 2 is used (see table 7); or
- e) any core if method 3 is used (see 5.3).

4.5 Coaxial cables

The outer jacket shall be marked in a legible manner in green or white and shall include:

- a) the standard number of the coaxial cable;
- b) the country, manufacturer and year (see 3.1).

Table 3 — Method 1A

| Number of cores in cable | | | | | | | | | | |
|--------------------------|-----------------------------------------|------|--------|-------|------|---------|--------|----------|------|-------|
| 1 | White | | | | _ | _ | _ | | _ | _ |
| 2 | White | Blue | _ | _ | _ | _ | _ | — | | l — |
| 3 | White | Blue | Orange | | l — | _ | l – | _ | l — | l — |
| 4 | White | Blue | Orange | Green | | | - | | l — | |
| 5 | White | Blue | Orange | Green | Red | | l — | | | |
| 6 | White | Blue | Orange | Green | Red | Black | | | _ | l — |
| 7 | White | Blue | Orange | Green | Red | Black | Yellow | | l — | _ |
| 8 | White | Blue | Orange | Green | Red | Black | Yellow | Violet | | _ |
| 9 | White | Blue | Orange | Green | Red | Black | Yellow | Violet | Grey | |
| 10 | White | Blue | Orange | Green | Red | Black | Yellow | Violet | Grey | Brown |
| | *************************************** | 5,00 | Crungo | Groon | 1.00 | I Block | 10110 | V10101 | G.0, | Diowi |

NOTE — For cables having more than 10 cores, see table 6.

Table 4 — Method 1B

| Number of cores in cable | | | | | | | | | | |
|--------------------------|-------------|-------------|-------------|-----------|-------|-------|----------|--------|----------|------|
| 1 | White | _ | _ | _ | | T - | | Γ _ | | _ |
| 2 | Red | Blue | | _ | | | | | | |
| 3 | Red | Blue | Yellow | _ | | l — | | l — | | |
| 4 | Red | Blue | Yellow | Green | tana | | G - | | | |
| 5 | Red | Blue | Yellow | Green | White | Lal u | <u> </u> | l — | | _ |
| 6 | Red | Blue | Yellow | Green | White | Black | | _ | | |
| 7 | Red | Blue | Yellow | Green | White | Black | Brown | i)- | _ | _ |
| 8 | Red | Blue | Yellow | Green | White | Black | Brown | Orange | _ | _ |
| 9 | Red | Blue | Yellow | Green | White | Black | Brown | Orange | Purple | _ |
| 10 | Red | Blue | Yellow | Green | White | Black | Brown | Orange | Purple | Grey |
| NOTE — For cables | l having me | ore than 10 |) cores, se | e table 6 | | | U VV | I | <u> </u> | |

Table 5 — Method 1C

| Number of cores in cable | | | | | | | | | | |
|--------------------------|-------|------|----------|-------|-------|--------|--------|-------|------|------|
| 1 | White | | _ | _ | | _ | | | _ | |
| 2 | Red | Blue | <u> </u> | l — | | _ | _ | | | _ |
| 3 | Red | Blue | Yellow | | | l — | l — | _ | | |
| 4 | Red | Blue | Yellow | Green | _ | | | | | |
| 5 | Red | Blue | Yellow | Green | Black | | _ | _ | _ | _ |
| 6 | Red | Blue | Yellow | Green | Black | Violet | | | | |
| 7 | Red | Blue | Yellow | Green | Black | Violet | Orange | | | _ |
| 8 | Red | Blue | Yellow | Green | Black | Violet | Orange | Brown | | |
| 9 | Red | Blue | Yellow | Green | Black | Violet | Orange | Brown | Pink | |
| 10 | Red | Blue | Yellow | Green | Black | Violet | Orange | Brown | Pink | Grey |

NOTE — For cables having more than 10 cores, see table 6.