INTERNATIONAL STANDARD

ISO 8843

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Aircraft — Crimp-removable contacts for electrical connectors — Identification system

Aéronefs — Contacts à sertir amovibles pour connecteurs électriques — Système d'identification

Reference number
ISO 8843:1991(E)

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 8843 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*, Sub-Committee SC 1, *Aerospace electrical requirements*.

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Aircraft — Crimp-removable contacts for electrical connectors — Identification system

1 Scope

This International Standard establishes a system for identifying crimp-removable contacts for electrical connectors. The system specified in this International Standard consists of two colour bands around the external diameter of the crimp barrel and, for thermocouple contacts, of additional letters or of a colour point; the system, however, does not preclude further means being used to identify additional parameters, such as cable size and material.

This contact identification system applies, when specified, to ISO standard contacts. The use of this system is recommended for contacts of both the preferred and non-preferred types. In contacts of the preferred type, the contact active portion and the wire gauge accepted by the contact barrel have the same size. In contacts of the non-preferred type, the size of the active portion of the contact differs from the wire gauge accepted by the crimp barrel.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were 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 editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 2635:1979, *Aircraft — Conductors for general purpose aircraft electrical cables and aerospace applications — Dimensions and characteristics.*

IEC 62:1974, *Marking codes for resistors and capacitors.*

3 Identification system

3.1 Contacts shall be identified by two colour bands having a nominal width of 1 mm, as shown in table 1. The two colour bands identify the following characteristics.

— Band No. 1 defines the size of the active portion of the contact and indicates the contact insertion and extraction tools to be used together with the crimping tool locator to be selected;

— Band No. 2 defines the conductor sections accommodated by the crimp barrel.

As an alternative, the contacts of the preferred type may be identified by a single band having a minimum width of 1 mm.

The colours used shall be in accordance with the requirements of IEC 62.

3.2 In addition, thermocouple contacts shall be identified by a marking, forward of the retention device, according to either

a) the following letter code:

CR: nickel/chromium

AL: nickel/aluminium

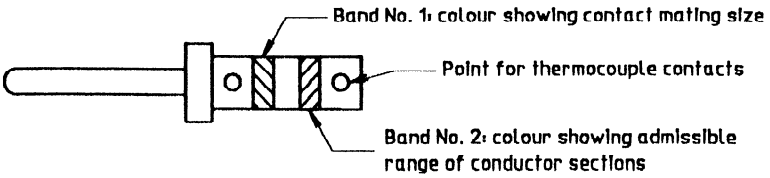
FE: iron

CN: copper/nickel; or

b) a colour point, the colour and position of which are given in table 1.

The contacts shall also be marked to identify the manufacturer.

Table 1 — Identification of electrical cylindrical contacts



Contact size	**24**	**23**	**22**	**20**	**16**	**12**	**10**	**8**	**4**	**0**
Band No. 1 [1]	Black	Violet	Green	Red	Blue	Yellow	White	Red	Blue	Yellow
Electrical conductors Cross-sectional area [2] mm² max.			min.		**AWG** [3]			**Band No. 2** [1]		
0,15			0,05		26 28 30			White		
0,24			0,09		24 26 28			Grey		
0,4			0,13		22 24 26			Green		
0,4			0,09		22 24 26 28			Black		
0,61			0,21		20 22 24			Red		
0,93			0,33		18 20 22			Violet		
1,34			0,59		16 18 20			Blue		
1,94			0,93		14 16 18			Orange		
3,18			1,82		12 14			Yellow		
5,3			2,88		10 12			Brown		
9			4,65		08 10					
22			14		04 06					
53			34		00 02					

Thermocouple contacts	Nickel/chrome	Nickel/aluminium	Iron	Copper/nickel	Copper/tellurium
Point	Yellow	Black	Blue	Red	Green

1) It is possible to have only one band if the colour of Bands No. 1 and No. 2 is identical.

2) The dimensions stated for conductor sections are from ISO 2635 except for sizes below 0,15 mm² (AWG 26).

3) AWG = American Wire Gauge (ref.).

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