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## **Aircraft — Nickel-chromium and nickel-aluminium thermocouple extension cables —**

### **Part 2 : Terminations — General requirements and tests**

*Aéronefs — Câbles de compensation de couples thermoélectriques en nickel-chrome et en  
nickel-aluminium —*

*Partie 2 : Raccordements — Exigences générales et essais*

Reference number  
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## 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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 8056-2 was prepared by Technical Committee ISO/TC 20, *Aircraft and space vehicles*.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

# Aircraft — Nickel-chromium and nickel-aluminium thermocouple extension cables —

## Part 2 : Terminations — General requirements and tests

### 0 Introduction

This International Standard on nickel-chromium and nickel-aluminium thermocouple extension cables for use in aircraft comprises the following four parts :

Part 1 : Conductors — General requirements and tests.

Part 2 : Terminations — General requirements and tests.

Part 3 : Crimp-type ring terminal ends — Dimensions.

Part 4 : Crimp-type butt connectors — Dimensions.

### 1 Scope and field of application

This part of ISO 8056 specifies the design requirements and tests for the crimping of non-insulated terminations, of nickel-chromium or nickel-aluminium alloy, to the standard flexible conductors of nickel-chromium or nickel-aluminium thermocouple extension cables, respectively, in such a manner that the thermoelectric integrity and constancy of resistance of a thermocouple circuit are contained within specified limits.

Although the metallic materials used in the crimped joint will be the same for all groups, the limiting temperature of use of the crimped joint is defined by the insulation of the cable and will fall within one of the following groups : 105 °C, 150 °C, 200 °C and 260 °C.

### 2 Reference

ISO 1966, *Crimped joints for aircraft electrical cables*.

### 3 Definitions

For the purposes of this International Standard, the following definitions apply.

**3.1 crimped joint** : A permanent connection formed by crimping a terminal end or in-line splice of an appropriate thermocouple material, for example nickel-chromium or nickel-aluminium, to its matching conductor.

**3.2 terminal end** : A connecting device, of an appropriate thermocouple material, with a barrel accommodating the conductor of a thermocouple extension cable, with or without additional provision to accommodate the insulation of the cable. A permanent joint between conductor and terminal is made, and the cable insulation may be secured, by using a crimping tool.

**3.3 termination** : A terminal end or in-line splice.

**3.4 crimping** : The physical compression or deformation of a conductor barrel round a conductor to make a mechanical and electrical connection.

**3.5 insulation support** : That part of a terminal barrel into which the insulation of the cable is inserted and that, by re-forming, supports the insulation.

**3.6 crimping tool** : A manually operated or power-operated mechanical device for crimping and, where required, re-forming the insulation support.

**3.7 positioner** : A locator, turret or other device serving to locate and control the position of the crimp on the barrel of the terminal.