



**SLOVENSKI STANDARD**  
**kSIST FprEN 16602-70-30:2014**  
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**Zagotavljanje varnih proizvodov v vesoljski tehniki - Spajanje z žičnim ovijanjem kontaktov visoko zanesljivih električnih konektorjev**

Space product assurance - Wire wrapping of high-reliability electrical connections

Raumfahrtproduktsicherung - Umhüllung von Kabeln für hochzuverlässige elektrische Verbindungen

Assurance produit des projets spatiaux - Enveloppe de fils pour connexion électrique à fiabilité élevée

**Ta slovenski standard je istoveten z: FprEN 16602-70-30**

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**ICS:**

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems
49.140	Vesoljski sistemi in operacije	Space systems and operations

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**FINAL DRAFT**  
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English version

## Space product assurance - Wire wrapping of high-reliability electrical connections

Assurance produit des projets spatiaux - Enveloppe de fils pour connexion électrique à fiabilité élevée

Raumfahrtproduktsicherung - Umhüllung von Kabeln für hochzuverlässige elektrische Verbindungen

This draft European Standard is submitted to CEN members for unique acceptance procedure. It has been drawn up by the Technical Committee CEN/CLC/TC 5.

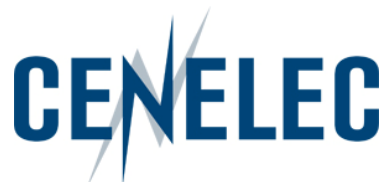
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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

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## Foreword

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This document (FprEN 16602-70-30:2013) has been prepared by Technical Committee CEN/CLC/TC 5 "Space", the secretariat of which is held by DIN (Germany).

This document (FprEN 16602-70-30:2013) originates from ECSS-Q-ST-70-30C.

This document is currently submitted to the Unique Acceptance Procedure.

This document has been developed to cover specifically space systems and will therefore have precedence over any EN covering the same scope but with a wider domain of applicability (e.g. : aerospace).

# 1

## Scope

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This Standard specifies requirements for preparing and assembling parts to be joined by wire wrapping, as well as the selection, calibration, use and certification of wire wrapping tools.

The covered wire-wrapped connections are illustrated in Figure 1-1.

This type of connection is similar to “Class A preferred” or “modified” connection detailed in MIL-STD-1130, and NASA NHB 5300.4(3H).

Only previously tested and qualified wire-wrapped connections are covered by this Standard, which includes four wire sizes from 24 AWG to 30 AWG, and three terminal post sizes up to 1,78 mm maximum diagonal. A step-by step procedure is covered in the informative Annex A.

The use of heavier gauge wire and larger terminals is not generally prohibited, but it is considered unlikely that for such dimensions the method of wire-wrapping would be chosen as the electrical interconnection technique. Instead it is assumed that wire larger than 24 AWG will be multi-stranded and terminated by soldering in conformance with ECSS-Q-ST-70-08, or by crimping in conformance with ECSS-Q-ST-70-26.

Training and certification requirements for operators and inspectors are defined in clause 5.6.7 and in ECSS-Q-ST-20.

With effect from the date of approval, this Standard announces the adoption of the external document on a restricted basis for use in the European Cooperation for Space Standardization (ECSS) system.

This standard may be tailored for the specific characteristic and constraints of a space project in conformance with ECSS-S-ST-00.