SLOVENSKI STANDARD
SIST EN 3375-002:2012

01-maj-2012

Aeronavtika - Električni kabli za digitalni prenos podatkov - 002. del: Splošno

Aerospace series - Cable, electrical, for digital data transmission - Part 002: General

Luft- und Raumfahrt - Elektrische Leitungen für Digitaldatenübertragungen - Teil 002: Allgemeines

Série aérospatiale - Câbles électriques pour transmission de données numériques - Partie 002 : Généralités

Ta slovenski standard je istoveten z: **EN 3375-002:2012**

ICS:

49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

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Foreword

This document (EN 3375-002:2012) has been prepared by the Aerospace and Defence Industries Association of Europe - Standardization (ASD-STAN).

After enquiries and votes carried out in accordance with the rules of this Association, this Standard has received the approval of the National Associations and the Official Services of the member countries of ASD, prior to its presentation to CEN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

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1 Scope

This European Standard specifies the list of product standards and common characteristics of signal data transmission electrical cables for use in the on-board electrical systems of aircraft, at operating temperatures between
–65 °C and 150 °C or 200 °C or 260 °C (as specified in product standards).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 2083, *Aerospace series — Copper or copper alloys conductors for electrical cables — Product standard*

EN 3375-001, *Aerospace series — Cable, electrical, for digital data transmission — Part 001: Technical specification*

EN 3375-003, *Aerospace series — Cable, electrical, for digital data transmission — Part 003: Single braid —77 Ohms — Type KG — Product standard*

EN 3375-004, *Aerospace series — Cable, electrical, for digital data transmission — Part 004: Double braid — 77 Ohms — Type WJ — Product standard*

EN 3375-005, *Aerospace series — Cable, electrical, for digital data transmission — Part 005: Double braid + metallic layer — 77 Ohms — Type WV — Product standard*

EN 3375-006, *Aerospace series — Cable, electrical, for digital data transmission — Part 006: Single braid — 78 Ohms — Type XM — Product standard*

EN 3375-007, *Aerospace series — Cable, electrical, for digital data transmission — Part 007: Double braid — 77 Ohms — Type WW — Product standard*

EN 3375-008, *Aerospace series — Cable, electrical, for digital data transmission — Part 008: Single braid — Star Quad 100 Ohms — Type KD — Product standard*

EN 3375-009, *Aerospace series — Cable, electrical, for digital data transmission — Part 009: Single braid — CAN Bus — 120 Ohms — Type WX — Product standard*

EN 3375-010, *Aerospace series — Cable, electrical, for digital data transmission — Part 010: Single braid — CAN Bus — 100 Ohms — Type WF — Product standard* [1)]

EN 3375-011, *Aerospace series — Cable, electrical, for digital data transmission — Part 011: Single braid — Star Quad 100 Ohms — Lightweight — Type KL — Product standard* [1)]

EN 3375-012, *Aerospace series — Cable, electrical, for digital data transmission — Part 012: Single braid — Star Quad 100 Ohms — Fire resistant — Type KH — Product standard* [1)]

EN 3475-100, *Aerospace series — Cables, electrical, aircraft use — Test methods — Part 100: General*

1) In study at the date of publication of this standard.

EN 3838, *Aerospace series — Requirements and tests on user-applied markings on aircraft electrical cables* [2)]

EN 4434, *Aerospace series — Copper or copper alloy lightweight conductors for electrical cables — Product standard (Normal and tight tolerances)*

TR 6058, *Aerospace series — Cable code identification list* [3)]

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3475-100 apply.

4 List of product standards

See Table 1.

Table 1

EN 3375-	Main use	Cable code	Impedance Ω	Size	Type of screening	Attenuation at 1MHz dB/100 m	Others
003	BUS 1553	KG	77 ± 7	24	Single braid	3,6	200 °C
004		WJ		24	Double braid		
005		WV		24	High immunity		
007		WW	77 ± 7	26	Double braid	4,1	200 °C
006	BUS	XM	78 ± 7	24	Single braid	3,5	200 °C
008	ETHERNET QUAD	KD	100 ± 15	24	Single braid	2,1	125 °C
011		KL	100 ± 15	24	Single braid	2,1	125 °C – Lightweight
012		KH	100 ± 15	24	Single braid	2,1	260 °C – Fire resistant
009	CAN BUS	WX	120 ± 12	26	Single braid	3,0	200 °C
010		WF	100 ± 10	24	Single braid	3,0	200 °C

NOTE Values mentioned in this Table are for information. For more precisions, please refer to concerned product standard.

5 Materials and construction

5.1 Materials

The cable conductors shall be made of copper or copper alloy and silver plated according to EN 2083 or EN 4434 code C (except otherwise specified in the product standard).

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2) Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

3) Published as ASD-STAN Technical Report at the date of publication of this standard (www.asd-stan.org).

5.2 Construction

Numbers of cores, screen description and jacket definition: See product standard.

5.3 Colour coding

Core: white and blue

Jacket: white

(except otherwise specified in the product standard).

6 Identification and marking

The identification and marking of cables by the manufacturer shall be in accordance with EN 3375-001.

As the designation, required for orders, is generally too long, for use in electrical drawings a shorter cross designation (without colour information) is given by the TR 6058 plus the corresponding nearest AWG (gauge code).

EXAMPLE Designation: EN3375-004C01

Cross reference: WJ C 24

This shorter designation is used for identification and marking as in the following example, see Figure 1:

4) Spaces are mandatory, with a possible exception for the second one.