SLOVENSKI STANDARD
SIST EN 3660-064:2016

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Nadomešča:
SIST EN 3660-064:2010

Aeronavtika - Dodatki za okrogle in pravokotne električne in optične konektorje - 064. del: Kabelska spojka, tip K, ravna, za toplotno skrčljive dele, oklopljena, tesnjena, samozapiralna za EN 2997 - Standard za proizvod

Aerospace series - Cable outlet accessories for circular and rectangular electrical and optical connectors - Part 064: Cable outlet, style K, straight, for heat shrinkable boot, shielded, sealed, self-locking for EN 2997 - Product standard

Luft- und Raumfahrt - Endgehäuse für elektrische und optische Rund- und Rechtecksteckverbinder - Teil 064: Endgehäuse, Bauform K, gerade, für wärmeschrumpfende Bauteile, Schirmanschluß, abgedichtet, selbstsichernd für EN 2997 - Produktnorm

Série aérospatiale - Accessoires arrière pour connecteurs circulaires et rectangulaires électriques et optiques - Partie 064 : Raccord, type K, droit, blindé, étanche, pour manchon thermorétractable, auto-freiné pour EN 2997 - Norme de produit

Ta slovenski standard je istoveten z: **EN 3660-064:2016**

ICS:

31.220.99	Druge elektromehanske komponente	Other electromechanical components
49.060	Letalska in vesoljska električna oprema in sistemi	Aerospace electric equipment and systems

SIST EN 3660-064:2016 **en,fr,de**

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 3660-064

January 2016

ICS 49.060

Supersedes EN 3660-064:2009

English Version

Aerospace series - Cable outlet accessories for circular and rectangular electrical and optical connectors - Part 064: Cable outlet, style K, straight, for heat shrinkable boot, shielded, sealed, self-locking for EN 2997 - Product standard

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This European Standard was approved by CEN on 8 June 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 3660-064:2016) 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 European 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 July 2016, and conflicting national standards shall be withdrawn at the latest by July 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 3660-064:2009.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard defines a range of cable outlets, style K, straight, shielded, sealed, self-locking (anti-rotational) for heat shrinkable boot, and / or metallic band under the following conditions:

The mating connectors are listed in EN 3660-002.

NOTE Class N in EN 3660-001 cross refers to class F in EN 3660-064.

Temperature range,	Class F (N)	:	– 65 °C to 200 °C (See note above);
	Class K	:	– 65 °C to 200 °C;
	Class KE	:	– 65 °C to 260 °C;
	Class W	:	– 65 °C to 175 °C;
	Class T	:	– 65 °C to 175 °C (Nickel PTFE plating);
	Class Z	:	– 65 °C to 175 °C (Zinc Nickel plating).
Associated electrical accessories		:	EN 3660-033 Metallic band (for shield termination).

These cable outlets are designed for termination of overall shielding braid and / or individual cable shields. They accommodate/permit the termination of heat shrinkable boots.

2 Normative references

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

EN 2591- [1], *Aerospace series — Elements of electrical and optical connection — Test methods*

EN 2997 (series), *Aerospace series — Connectors, electrical, circular, coupled by threaded ring, fire-resistant or non fire-resistant, operating temperatures – 65 °C to 175 °C continuous, 200 °C continuous, 260 °C peak*

EN 3660-001, *Aerospace series — Cable outlet accessories for circular and rectangular electrical and optical connectors — Part 001: Technical specification*

EN 3660-002, *Aerospace series — Cable outlet accessories for circular and rectangular electrical and optical connectors — Part 002: Index of product standards*

EN 3660-033, *Aerospace series — Cable outlet accessories for circular and rectangular electrical and optical connectors — Part 033: Stainless steel banding band, style Z, for attachment of individual and/or overall screens to cable outlets — Product standard* [2]

AS85049A, *Connector accessories, electrical general specification for-* [3]

IEC 60529, *Degrees of protection provided by enclosures (IP Code)*

DIN 82, *Knurling*

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1) All its parts quoted in this European Standard.

2) In preparation at the date of publication of this European Standard.

3) Published by: SAE National (US) Society of Automotive Engineers http://www.sae.org/

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 3660-001 apply.

(Self-locking / anti rotational definition) A self-locking or anti rotational mechanism provides a nut rotation with moderate torque in the mated direction and provides a greater torque in the unmated direction.

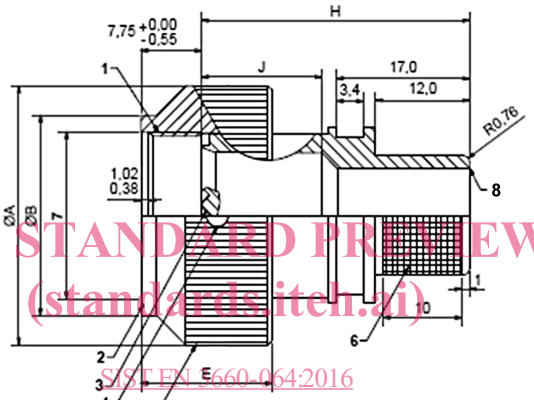
4 Characteristics

4.1 Dimensions and mass

For dimensions and mass, see Figure 1 and Table 1 to Table 4.

For cable entry dimensions, see 4.2.

All dimensions are in millimetres.



Key

1 Thread *C*
2 Marking
3 Number of teeth *N*
4 Four tooling holes spaced 90° apart. Ø 2,60, depth, 1,27
5 Straight knurl. Pitch manufacturer's option.
6 RKV 08 DIN 82. Figure 2. (Please note there may be crossover dependent on diameter and pitch)
7 Clearance on thread *C*
8 Break edge

NOTE 1 Cable outlets may be manufactured as cast, fabricated or machined (manufactures option)

NOTE 2 No sharp edges / burrs permissible on internal or external surfaces / joints.

Surface finish of 1,6 µm max. on all internal surfaces

Figure 1

Table 1 — Fixed dimensions of shell

Dimensions in millimetres

Shell size	Ø *A* max.	Ø *B* max.	*C* Thread	*E* max.
08	22,48	15,67	0,500-20UNF	15,3
10	25,65	18,64	0,625-24UNEF	15,3
12	28,83	21,79	0,750-20UNEF	15,3
14	32,00	24,99	0,875-20UNEF	15,3
16	35,18	28,24	1,000-20UNEF	15,3
18	38,55	30,94	1,0625-18UNEF	15,3
20	41,53	34,16	1,1875-18UNEF	15,3
22	44,70	37,29	1,3125-18UNEF	15,3
24	47,89	40,46	1,4375-18UNEF	15,3
28	54,23	49,45	1,750-18UNS	15,3

Table 2 — Variable dimensions of wiring chamber

Dimensions in millimetres

Length code wiring chamber	*H* max.	*J* max.
A	27,5	8,57
B	35,5	16,57
C	40,5	21,60
D	50,5	31,60
The code and dimensions of the wiring chamber shall be valid for all sizes of cable outlet.		

Table 3 — Mass for classes F (N), T, W and Z

Nominal mass in grams

Shell size code	Cable entry – size code												Length code wiring chamber
	A	B	C	D	E	F	G	H	J	K	L	M	
08	10,7	11,3	—	—	—	—	—	—	—	—	—	—	A
	11,4	12,0	—	—	—	—	—	—	—	—	—	—	B
	11,9	12,5	—	—	—	—	—	—	—	—	—	—	C
	12,7	13,3	—	—	—	—	—	—	—	—	—	—	D
10	12,4	13,1	13,7	14,3	—	—	—	—	—	—	—	—	A
	13,4	14,1	14,7	15,3	—	—	—	—	—	—	—	—	B
	14,0	14,7	15,3	15,9	—	—	—	—	—	—	—	—	C

Shell size code	Cable entry – size code												Length code wiring chamber
	A	B	C	D	E	F	G	H	J	K	L	M	
	15,2	15,9	16,6	17,1	—	—	—	—	—	—	—	—	D
12	14,5	14,9	15,3	16,1	16,6	17,2	—	—	—	—	—	—	A
	15,7	16,2	16,6	17,3	17,9	18,4	—	—	—	—	—	—	B
	16,5	16,9	17,4	18,1	18,7	19,2	—	—	—	—	—	—	C
	18,1	18,5	18,9	19,6	20,2	20,7	—	—	—	—	—	—	D
14	17,8	18,2	18,6	19,0	19,2	20,0	21,2	—	—	—	—	—	A
	19,3	19,7	20,1	20,5	20,8	21,6	22,7	—	—	—	—	—	B
	20,3	20,7	21,1	21,4	21,7	22,5	23,7	—	—	—	—	—	C
	22,2	22,6	23,0	23,3	23,6	24,4	25,6	—	—	—	—	—	D
16	20,0	20,5	20,9	21,2	21,5	21,8	23,0	24,0	—	—	—	—	A
	21,8	22,3	22,7	23,0	23,3	23,6	24,8	25,8	—	—	—	—	B
	23,0	23,4	23,8	24,1	24,4	24,7	25,9	27,0	—	—	—	—	C
	25,2	25,6	26,0	26,4	26,7	27,0	28,1	29,2	—	—	—	—	D
18	21,2	21,6	22,0	22,4	22,6	22,9	23,5	24,9	—	x	—	—	A
	23,2	23,6	24,0	24,4	24,6	24,9	25,5	26,9	—	—	—	—	B
	24,4	24,8	25,2	25,6	25,9	26,2	26,7	28,2	—	—	—	—	C
	26,9	27,3	27,7	28,1	28,4	28,7	29,2	30,6	—	—	—	—	D
20	25,7	26,1	26,5	26,9	27,2	27,5	28,0	28,4	29,6	—	—	—	A
	28,0	28,4	28,8	29,2	29,4	29,7	30,3	30,7	31,9	—	—	—	B
	29,4	29,8	30,2	30,6	30,9	31,2	31,7	32,1	33,3	—	—	—	C
	32,3	32,7	33,1	33,4	33,7	34,0	34,6	35,0	36,2	—	—	—	D
22	27,1	27,5	27,9	28,3	28,5	28,8	29,4	29,8	30,3	31,3	—	—	A
	29,6	30,0	30,4	30,8	31,1	31,4	32,0	32,3	32,9	33,8	—	—	B
	31,2	31,6	32,0	32,4	32,7	33,0	33,5	33,9	34,5	35,4	—	—	C
	34,4	34,8	35,2	35,6	35,9	36,2	36,7	37,1	37,7	38,6	—	—	D
24	33,1	33,5	33,9	34,3	34,5	34,9	35,4	35,8	36,4	36,6	37,7	—	A
	35,9	36,4	36,8	37,1	37,4	37,7	38,3	38,6	39,2	39,4	40,5	—	B
	37,7	38,1	38,5	38,9	39,2	39,5	40,0	40,4	41,0	41,2	42,3	—	C
	41,3	41,7	42,1	42,4	42,7	43,0	43,6	44,0	44,5	44,7	45,8	—	D
28	43,9	43,5	43,9	44,3	44,5	44,9	45,4	45,8	46,4	46,6	47,0	48,0	A
	46,2	46,7	47,1	47,4	47,7	48,0	48,6	48,9	49,5	49,7	50,1	51,1	B
	48,2	48,6	49,0	49,4	49,7	50,0	50,5	50,9	51,5	51,7	52,1	53,1	C
	52,3	52,7	53,1	53,4	53,7	54,0	54,6	55,0	55,5	55,7	56,8	58,8	D

Table 4 — Mass for classes K and KE

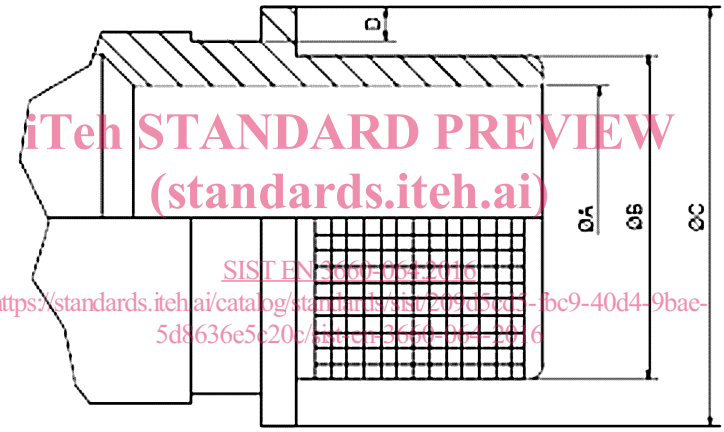
Nominal mass in grams

Shell size code	Cable entry – size code												Length code wiring chamber
	A	B	C	D	E	F	G	H	J	K	L	M	
08	26,9	28,5	—	—	—	—	—	—	—	—	—	—	A
	28,7	30,3	—	—	—	—	—	—	—	—	—	—	B
	29,8	31,4	—	—	—	—	—	—	—	—	—	—	C
	31,9	33,6	—	—	—	—	—	—	—	—	—	—	D
10	31,0	32,8	34,6	36,0	—	—	—	—	—	—	—	—	A
	33,5	35,3	37,0	38,5	—	—	—	—	—	—	—	—	B
	35,0	36,8	38,6	40,0	—	—	—	—	—	—	—	—	C
	38,1	39,9	41,7	43,1	—	—	—	—	—	—	—	—	D
12	35,9	37,0	38,2	40,1	41,6	43,0	—	—	—	—	—	—	A
	39,0	40,1	41,3	43,2	44,7	46,1	—	—	—	—	—	—	B
	41,0	42,1	43,2	45,1	46,7	48,1	—	—	—	—	—	—	C
	44,9	46,0	47,1	49,0	50,6	51,9	—	—	—	—	—	—	D
14	42,9	44,0	45,1	46,0	46,8	48,9	52,0	—	—	—	—	—	A
	46,7	47,8	48,9	49,8	50,6	52,7	55,8	—	—	—	—	—	B
	49,1	50,2	51,3	52,2	53,0	55,1	58,2	—	—	—	—	—	C
	53,9	55,0	56,0	57,0	57,7	59,9	63,0	—	—	—	—	—	D
16	48,2	49,3	50,4	51,4	52,1	52,9	56,1	58,8	—	—	—	—	A
	52,8	53,9	55,0	55,9	56,6	57,4	60,6	63,4	—	—	—	—	B
	55,6	56,7	57,8	58,7	59,4	60,3	63,4	66,2	—	—	—	—	C
	61,3	62,4	63,4	64,4	65,1	65,9	69,1	71,9	—	—	—	—	D
18	52,1	53,2	54,3	55,2	55,9	56,8	58,3	62,1	—	—	—	—	A
	57,1	58,2	59,3	60,3	60,9	61,8	63,3	67,1	—	—	—	—	B
	60,2	61,4	62,4	63,4	64,1	64,9	66,4	70,2	—	—	—	—	C
	66,5	67,6	68,7	69,7	70,3	71,2	72,7	76,5	—	—	—	—	D
20	62,0	63,2	64,2	65,2	65,9	66,7	68,2	69,2	72,4	—	—	—	A
	67,8	68,9	70,0	70,9	71,6	72,4	74,0	74,9	78,1	—	—	—	B
	71,4	72,5	73,5	74,5	75,2	76,0	77,5	78,5	81,7	—	—	—	C
	78,5	79,6	80,7	81,7	82,3	83,2	84,7	85,7	88,8	—	—	—	D
22	66,1	67,2	68,3	69,2	69,9	70,8	72,3	73,3	74,7	77,0	—	—	A
	72,5	73,6	74,7	75,6	76,3	77,2	78,7	79,7	81,1	83,4	—	—	B
	76,5	77,6	78,7	79,7	80,3	81,2	82,7	83,7	85,1	87,5	—	—	C
	84,5	85,6	86,7	87,7	88,4	89,2	90,7	91,7	93,1	95,5	—	—	D
24	78,6	79,8	80,8	81,8	82,5	83,3	84,8	85,8	87,3	87,7	90,7	—	A

Shell size code	Cable entry – size code												Length code wiring chamber
	A	B	C	D	E	F	G	H	J	K	L	M	
	85,8	86,9	88,0	88,9	89,6	90,4	91,9	92,9	94,4	94,8	97,8	—	B
	90,2	91,3	92,4	93,4	94,1	94,9	96,4	97,4	98,8	99,3	102,3	—	C
	99,1	100,2	101,3	102.3	103,0	103,8	105,3	106,3	107,7	108,2	111,2	—	D
28	103,6	104,8	105,8	106,8	107,5	108,3	109,8	110,8	112,3	112,7	113,7	116,7	A
	111,8	112,9	114,0	114,9	115,6	116,4	117,9	118,9	120,4	120,8	121,8	124,8	B
	116,7	117,8	118,9	119,9	120,6	121,4	122,9	123,9	125,3	125,8	126,8	129,8	C
	126,7	127,8	128,9	129,9	130,6	131,4	132,9	133,9	135,3	135,8	136,8	139,8	D

4.2 Cable entry dimensions

See Figure 2, Table 5.



NOTE No burrs or sharp edges permitted

Figure 2 — Cable entry