BS EN 2997-011:2010

BSI Standards Publication

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

Part 011: Dummy receptacle — Product standard

raising standards worldwide™

National foreword

This British Standard is the UK implementation of EN 2997-011:2010. It supersedes BS EN 2997-011:2006 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee ACE/6, Aerospace avionic electrical and fibre optic technology.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

ISBN 978 0 580 63466 6

ICS 49.060

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 July 2010

Amendments issued since publication

Date	Text affected

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 2997-011

June 2010

ICS 49.060

Supersedes EN 2997-011:2006

English Version

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 - Part 011: Dummy receptacle - Product standard

Série aérospatiale - Connecteurs électriques circulaires à accouplement par bague filetée, résistant au feu ou non, températures d'utilisation - 65 °C à 175 °C continu, 200 °C continu, 260 °C en pointe - Partie 011 : Embase de repos - Norme de produit

Luft- und Raumfahrt - Elektrische Rundsteckverbinder mit Schraubkupplung, feuerbeständig oder nicht feuerbeständig, Betriebstemperaturen - 65 °C bis 175 °C konstant, 200 °C konstant, 260 °C Spitze - Teil 011: Blinddose - Produktnorm

This European Standard was approved by CEN on 19 May 2010.

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 Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

Ref. No. EN 2997-011:2010: E

Contents

Page

Foreword

This document (EN 2997-011:2010) 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 December 2010, and conflicting national standards shall be withdrawn at the latest by December 2010.

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 2997-011:2006.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the characteristics of dummy receptacles in the family of circular electrical connectors coupled by threaded ring.

It applies to the class defined in Table 3.

For plugs associated with these dummy receptacles, see EN 2997-008.

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 2591-408, *Aerospace series — Elements of electrical and optical connection — Test methods — Part 408: Mating and unmating forces*

EN 2997-001:2006, *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 — Part 001: Technical specification*

EN 2997-002, *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 — Part 002: Specification of performance and contact arrangements*

EN 2997-008, *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 — Part 008: Plug — Product standard*

ISO 263, *ISO inch screw threads — General plan and selection for screws, bolts and nuts — Diameter range 0,06 to 6 in*

3 Terms and definitions

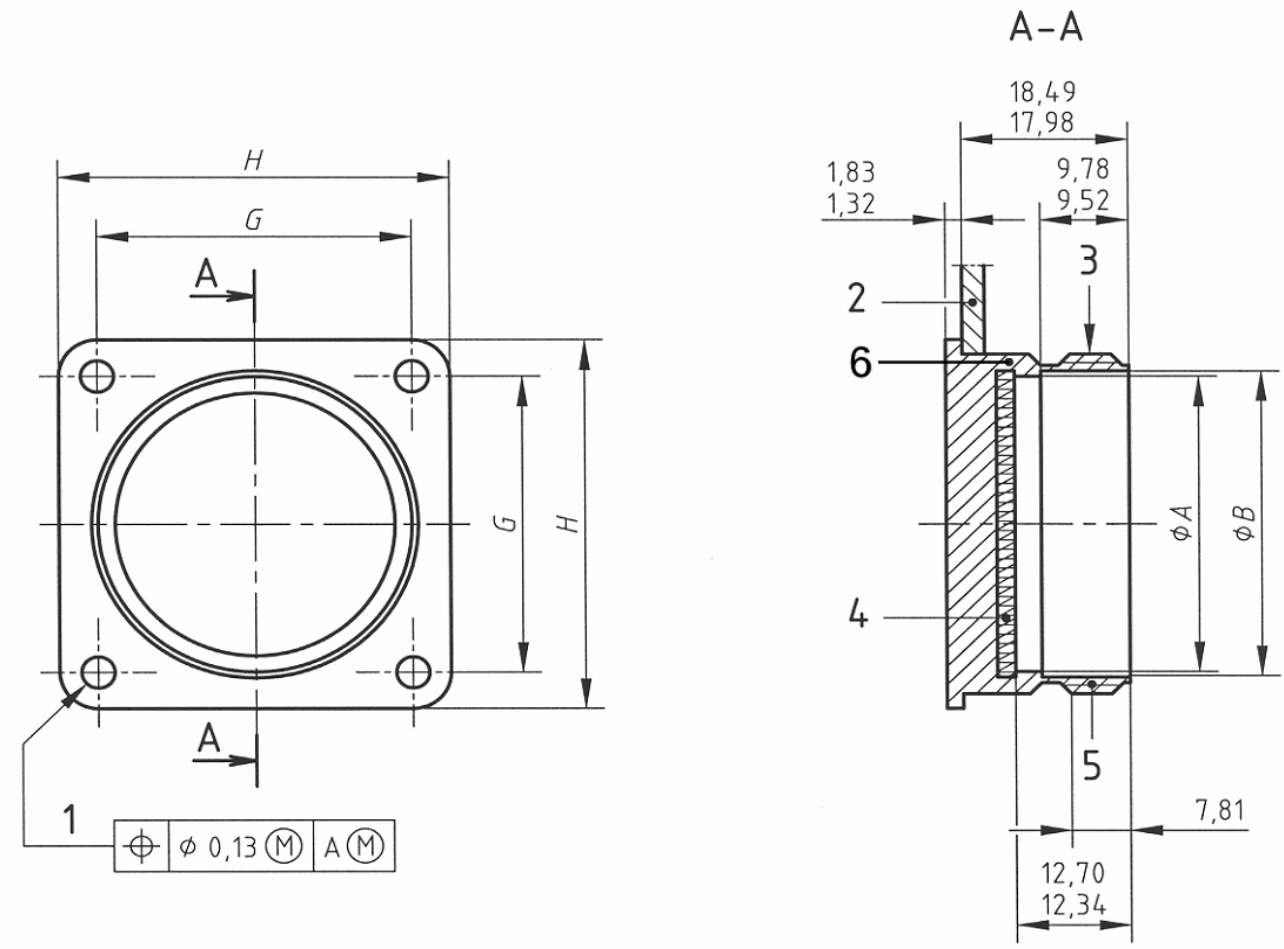
For the purposes of this standard, the terms and definitions given in EN 2997-001:2006 apply.

4 Required characteristics

4.1 Dimensions and mass

See Figure 1 and Table 1.

Dimensions and tolerances are in millimetres; they apply after surface treatment.



Key

1 Four holes $\begin{matrix}\varnothing\ 3{,}30\\ \varnothing\ 3{,}05\end{matrix}$ shell sizes 08 to 22

Four holes $\begin{matrix}\varnothing\ 3{,}91\\ \varnothing\ 3{,}68\end{matrix}$ shell sizes 24 to 28

2 Panel, see Figure 3.
3 Thread
4 Gasket
5 Coupling, external part, conforms to EN 2997-001
6 Blue colour band 0,54 mm min. width

Figure 1

Table 1

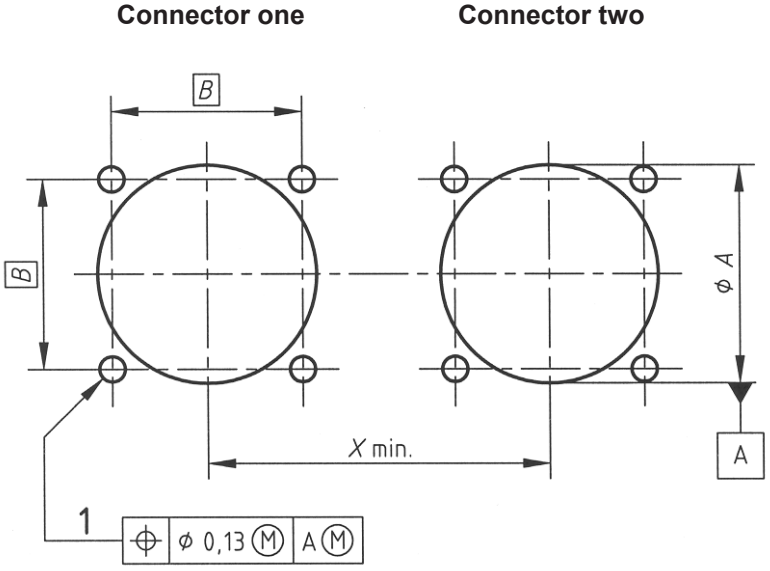
Housing size	Thread class 2A [a]	∅ *A* + 0,13 0	∅ *B* + 0,13 0	*G*	*H* max.	*H* min.	Mass g max. Stainless steel	Mass g max. Aluminium alloy
08	0,5625-24UNEF	10,87	12,07	15,09	20,75	20,49	19,5	7,0
10	0,6875-24UNEF	13,46	14,63	18,26	23,93	23,67	27,9	10,0
12	0,8750-20UNEF	17,78	18,95	20,62	26,32	26,06	40,2	14,4
14	0,9375-20UNEF	19,53	20,70	23,01	28,71	28,45	45,0	16,1
16	1,0625-18UNEF	22,76	23,93	24,61	31,88	31,62	55,0	19,7
18	1,1875-18UNEF	25,45	26,62	26,97	34,24	33,98	67,9	24,4
20	1,3125-18UNEF	28,63	29,74	29,36	36,63	36,37	78,6	28,2
22	1,4375-18UNEF	31,80	32,94	31,75	39,80	39,54	92,9	33,3
24	1,5625-18UNEF	34,98	36,07	34,92	43,39	43,13	107,8	38,7
28	1,8125-16UN	41,32	42,49	39,67	50,93	50,67	140,4	50,4

[a] ISO 263.

4.2 Panel cut-out and mounting of connectors

See Figure 2 and Table 2 for panel cut-out and Figure 3 for mounting of connectors.

Dimensions and tolerances are in millimetres.



Key

1 Four holes ∅ *C*

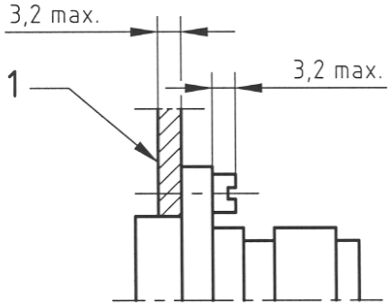
X min. value is calculated as follows: *D*/2 connector one + *D*/2 connector two. (See Table 2 for value *D*.)

Figure 2

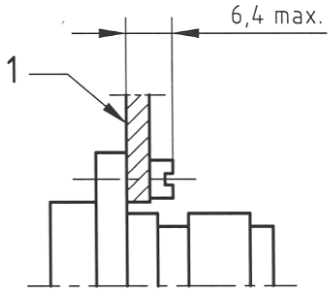
Table 2

Housing size	∅ *A* min.	*B*	*C*	*D* min.
08	15,80	15,09	3,30 3,10	31,70
10	18,70	18,26		34,90
12	23,40	20,62		39,60
14	24,90	23,01		41,25
16	28,30	24,61		44,45
18	31,10	26,97		47,35
20	34,50	29,36		51,90
22	37,50	31,75		54,10
24	40,60	34,92	3,91 3,68	57,25
28	48,00	39,67		65,25

Front mounting



Rear mounting



Key

1 Panel

Figure 3

4.3 Material, surface treatment

See Table 3.

4.4 Main general characteristics

See EN 2997-002.

4.5 Possible combinations of dummy receptacles and connectors

See EN 2997-002.

5 Quality assurance − Qualification

5.1 General

Qualification of a model (see EN 2997-002) is obtained either:

— when the specimens of this class as defined in 5.2.2 have satisfied the applicable tests in groups 11 to14 (see Table 16 of EN 2997-001:2006); or

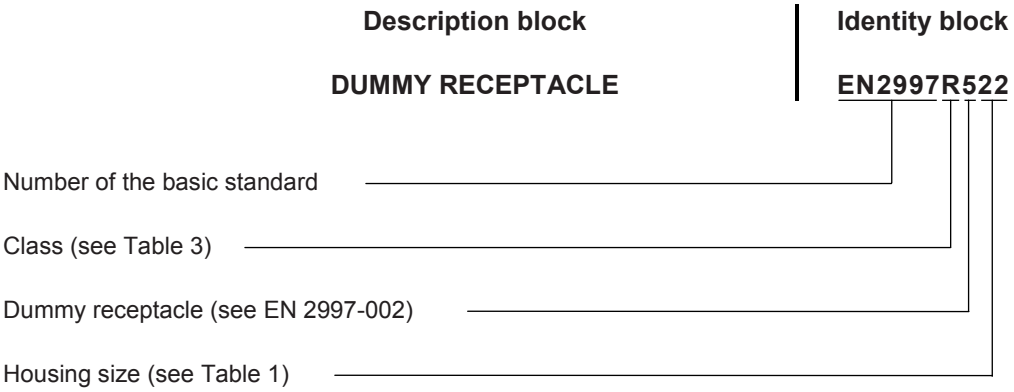
— by extension of qualification see Table 15 of EN 2997-001:2006. In this case, three complete specimens as defined in 5.2.2 shall be tested for each group or for test EN 2591-408.

5.2 Sampling and definition of specimens

The specimens of the model to be qualified shall be divided equally for each test group between small sizes (8 or 10 or 12), medium size (14 or 16 or 18) and large size (20 or 22 or 24 or 28).

6 Designation

EXAMPLE



NOTE If necessary, the code I9005 shall be placed between the description block and the identity block.

Table 3 — Dummy receptacle model and class

Class	Model description
K	Dummy receptacle in passivated stainless steel, 500 h resistance to salt mist, maximum operating temperature 200 °C continuous
R	Dummy receptacle in nickel-plated aluminium alloy, 48 h resistance to salt mist, maximum operating temperature 200 °C continuous
W	Dummy receptacle in olive-green cadmium-plated aluminium alloy, 500 h resistance to salt mist, maximum operating temperature 175 °C continuous
KE	Dummy receptacle in passivated stainless steel, 500 h resistance to salt mist, maximum operating temperature 260 °C peak

7 Marking

Unless there are other specific contractual requirements, the marking shall include:

— the identity block as defined in Clause 6;

— the date of manufacture (year, week);

— the manufacturer's name or trade mark.

8 Technical specification

See EN 2997-001.

British Standards Institution (BSI)

BSI is the independent national body responsible for preparing British Standards and other standards-related publications, information and services.
It presents the UK view on standards in Europe and at the international level.

It is incorporated by Royal Charter.

Revisions

British Standards are updated by amendment or revision. Users of British Standards should make sure that they possess the latest amendments or editions.

It is the constant aim of BSI to improve the quality of our products and services. We would be grateful if anyone finding an inaccuracy or ambiguity while using this British Standard would inform the Secretary of the technical committee responsible, the identity of which can be found on the inside front cover.

Tel: +44 (0)20 8996 9001 Fax: +44 (0)20 8996 7001

BSI offers Members an individual updating service called PLUS which ensures that subscribers automatically receive the latest editions of standards.

Tel: +44 (0)20 8996 7669 Fax: +44 (0)20 8996 7001
Email: plus@bsigroup.com

Buying standards

You may buy PDF and hard copy versions of standards directly using a credit card from the BSI Shop on the website **www.bsigroup.com/shop.** In addition all orders for BSI, international and foreign standards publications can be addressed to BSI Customer Services.

Tel: +44 (0)20 8996 9001 Fax: +44 (0)20 8996 7001
Email: orders@bsigroup.com

In response to orders for international standards, it is BSI policy to supply the BSI implementation of those that have been published as British Standards, unless otherwise requested.

Information on standards

BSI provides a wide range of information on national, European and international standards through its Knowledge Centre.

Tel: +44 (0)20 8996 7004 Fax: +44 (0)20 8996 7005
Email: knowledgecentre@bsigroup.com

Various BSI electronic information services are also available which give details on all its products and services.

Tel: +44 (0)20 8996 7111 Fax: +44 (0)20 8996 7048
Email: info@bsigroup.com

BSI Subscribing Members are kept up to date with standards developments and receive substantial discounts on the purchase price of standards. For details of these and other benefits contact Membership Administration.

Tel: +44 (0)20 8996 7002 Fax: +44 (0)20 8996 7001
Email: membership@bsigroup.com

Information regarding online access to British Standards via British Standards Online can be found at **www.bsigroup.com/BSOL**

Further information about BSI is available on the BSI website at **www.bsigroup.com/standards**

Copyright

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK

Tel +44 (0)20 8996 9001
Fax +44 (0)20 8996 7001
www.bsigroup.com/standards

raising standards worldwide™