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ICS: 49.060

Descriptors:

ENGLISH VERSION

Aerospace series
Connectors, electrical, circular, scoop-proof, triple start threaded coupling operating temperature 175 °C or 200 °C continuous — Part 004: Receptacle, hermetic, square flange mounting - Product standard

Série aérospatiale
Connecteurs électriques circulaires à contacts protégés, à accouplement par filetage à pas rapide à trois filets, températures d'utilisation 175 °C ou 200 °C continu — Partie 004 : Embase hermétique à fixation par collerette carrée - Norme de produit

Luft- und Raumfahrt
Elektrische Rundsteckverbinder, kontaktgeschützt, Drei-gangige Gewinde-Schnellkupplung Dauerbetriebstemperaturen 175 °C oder 200 °C — Teil 004: Hermetischer fester Steckverbinder mit quadratischem Montageflansch - Produktnorm

This "Aerospace Series" Prestandard has been drawn up under the responsibility of ASD-STAN (The Aerospace and Defense Industries Association of Europe - Standardization). It is published for the needs of the European Aerospace Industry. It has been technically approved by the experts of the concerned Domain following member comments.

Subsequent to the publication of this pre-standard, the technical content shall not be changed to an extent that interchangeability is affected, physically or functionally, without re-identification of the standard.

After examination and review by users and formal agreement of ASD-STAN, it will be submitted as a draft European Standard (prEN) to CEN (European Committee for Standardization) for formal vote and transformation to full European Standard (EN).

The CEN national members have then to implement the EN at national level by giving the EN the status of a national standard and by withdrawing any national standards conflicting with the EN.

Edition approved for publication	Comments should be sent within six months after the date of publication to ASD-STAN	Electrical Domain
30 November 2005		

Foreword

This standard was reviewed by the Domain Technical Coordinator of ASD-STAN's Electrical Domain.

After inquiries and votes carried out in accordance with the rules of ASD-STAN defined in ASD-STAN's General Process Manual, this standard has received approval for Publication.

Contents

1 Scope of application

This standard specifies the characteristics of square flange hermetic receptacles in the family of circular electrical connectors with triple start threaded coupling.

It applies to models in table 3.

The contacts are unremovable and soldered termination.

For plugs and protective covers, see EN 3645-008, EN 3645-011, EN 3645-012 and EN 3645-006 respectively.

These connectors are derived from and interchangeable with model Y in specification MIL-DTL-38999/21.

2 Normative references

This European Standard incorporates by dated or undated reference provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated and undated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 3645-001, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 001: Technical specification* [1)]

EN 3645-002, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 002: Specification of performance and contact arrangements* [1)]

EN 3645-006, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 006: Protective cover for receptacle - Product standard* [1)]

EN 3645-008, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 008: Non release plug with grounding ring - Product standard* [1)]

EN 3645-011, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 011: Lanyard release plug with grounding fingers - Type 1 - Product standard* [1)]

EN 3645-012, *Aerospace series - Connectors electrical, circular, scoop-proof, triple start threaded coupling, operating temperature 175 °C or 200 °C continuous - Part 012: Lanyard release plug with grounding fingers - Type 2 - Product standard* [1)]

MIL-DTL-38999/21, *Connectors, electrical, circular, miniature, high density, quick disconnect (bayonet, threaded and breech coupling), environment resistant, removable crimp and hermetic solder contacts, receptacle, box mounting flange, hermetic, triple start threaded coupling, hermetic solder contacts, series III, metric* [2)]

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1) Published as AECMA Prestandard at the date of publication of this standard
2) Published by: Department of Defence (DOD), The Pentagon, Washington D.C. 20301 USA

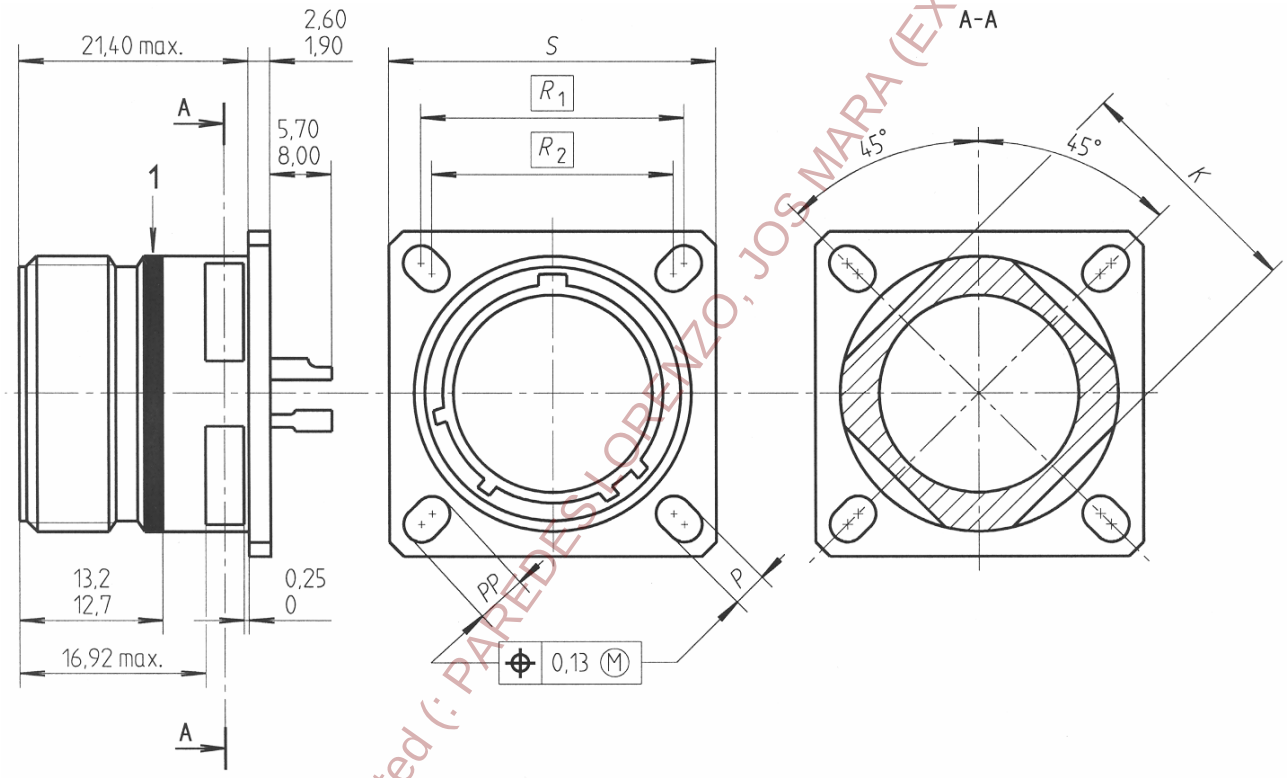
3 Terminology

See EN 3645-001.

4 Required characteristics

4.1 Dimensions, weights

Dimensions and tolerances are in millimetres.



Key

1 Red strip

Figure 1 — Square flange receptacle

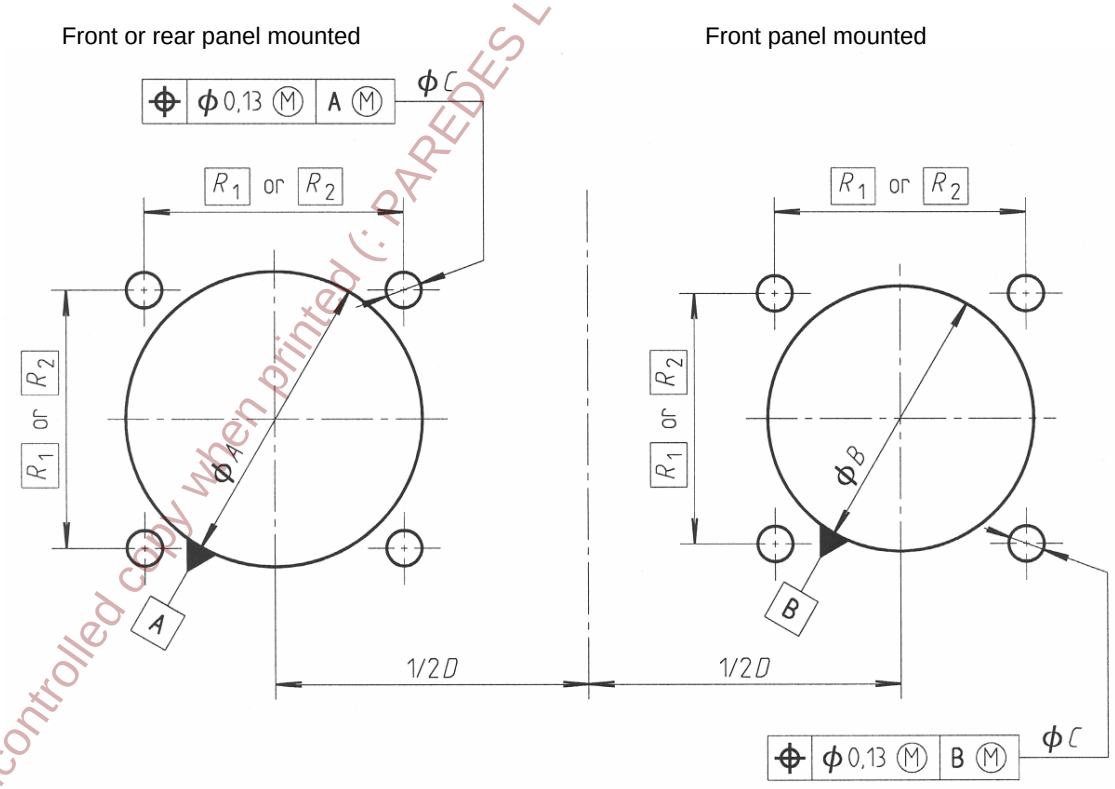
Table 1 - Square flange receptacle – Dimensions

Shell size	K max.	P ± 0,20	PP ± 0,20	R1	R2	S ±0,30	Stainless steel mass g max.
09	11,84	3,25	5,49	18,26	15,09	23,80	21
11	15,01		4,93	20,62	18,26	26,20	27
13	19,08			23,01	20,62	28,60	35
15	22,25			24,61	23,01	31,00	44
17	25,43			26,97	24,61	33,30	54
19	28,60			29,35	26,97	36,50	60
21	31,78			31,75	29,36	39,70	66
23	34,95	3,91	6,15	34,93	31,75	42,90	75
25	38,13			38,10	34,93	46,00	86

4.2 Materials and surface treatment

See Table 3.

4.3 Recommended panel cut-out



Optional panel cut-out

Rear panel mounted, thickness: 09 to 19: 5,94

21 to 25: 5,13

Figure 2 — Panel cut-out

Table 2 - Panel cut-out - Dimensions

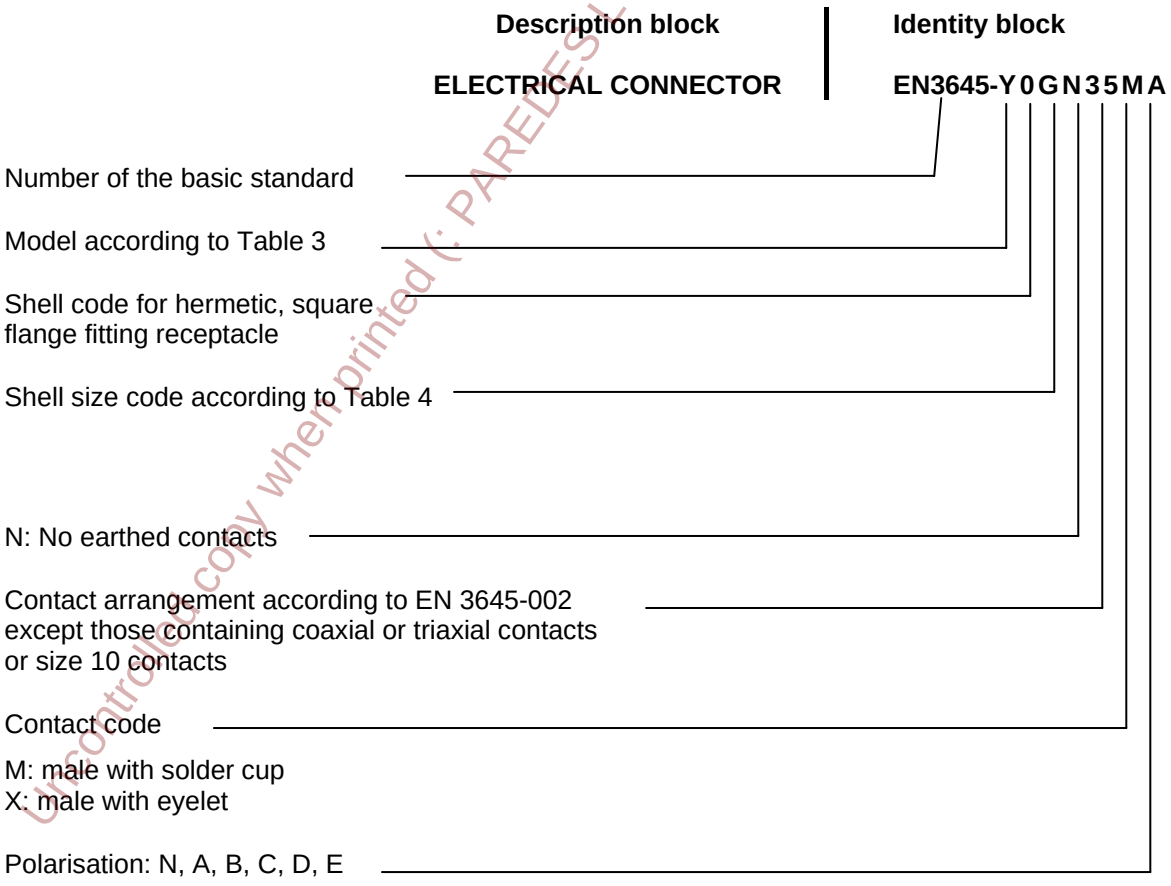
Shell size	A min.	B min.	C ± 0,13	D min.	R1	R2
09	16,66	13,11		31,80	18,26	15,09
11	20,22	15,88		35,00	20,62	18,26
13	23,42	19,05		39,40	23,01	20,62
15	26,59	23,01	3,25	42,50	24,61	23,01
17	30,96	25,81		45,70	26,97	24,61
19	32,94	28,98		48,50	29,36	26,97
21	36,12	32,16		51,70	31,75	29,36
23	39,29	34,93	3,91	54,90	34,93	31,75
25	42,47	37,69		58,00	38,10	34,93

Electrical, mechanical and climatic characteristics

See EN 3645-002.

5 Designation

EXAMPLE:



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

Table 3 - Model coding

Model	Description
Y	Sealed receptacles, with shell in stainless steel - Soldered contacts – Maximum operating temperature 200 °C continuous

Table 4 - Shell size code

Shell size	Code
09	A
11	B
13	C
15	D
17	E
19	F
21	G
23	H
25	J

6 Marking

According to EN 3645-001.

7 Technical specification

According to EN 3645-001.