

BS EN 6092:2016



BSI Standards Publication

Aerospace series — Receptacle, floating, double lug

National foreword

This British Standard is the UK implementation of EN 6092:2016.

The UK participation in its preparation was entrusted to Technical Committee ACE/12, Aerospace fasteners and fastening systems.

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

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Date	Text affected
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EUROPEAN STANDARD

EN 6092

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2016

ICS 49.030.99

English Version

Aerospace series - Receptacle, floating, double lug

Série aérospatiale - Réceptacle, flottant, double patte

Luft- und Raumfahrt - Haltenocken, schwimmend,
zweiseitig

This European Standard was approved by CEN on 11 March 2016.

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European foreword

This document (EN 6092:2016) 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 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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by February 2017.

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1 Scope

This European Standard specifies the dimensions, tolerances, required characteristics and mass of a receptacle for use in fuselage interior equipment and structural applications. This standard shall be used in conjunction with studs per EN 6088 or EN 6105.

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.

DIN 17850, *Titanium, chemical composition*

EN 2424, *Aerospace series — Marking of aerospace products*

EN 2516, *Aerospace series — Passivation of corrosion resistant steels and decontamination of nickel base alloys*

EN 2808, *Aerospace series — Anodizing of titanium and titanium alloys*

EN 6088, *Aerospace series — Stud*¹⁾

EN 6089, *Aerospace series — Washer, retaining, for usage with stud EN 6088*¹⁾

EN 6090, *Aerospace series — Washer, retaining*¹⁾

EN 6091, *Aerospace series — Circlip*¹⁾

EN 6094, *Aerospace series — Washer, spring, countersunk*¹⁾

EN 6095, *Aerospace series — Rotary fasteners — Structural and non-structural applications — Technical specification*¹⁾

EN 6105, *Aerospace series — Stud with shoulder*¹⁾

EN 10088-3, *Stainless steels — Part 3: Technical delivery conditions for semi-finished products, bars, rods, wire, sections and bright products of corrosion resisting steels for general purposes*

EN 10270-1, *Steel wire for mechanical springs — Part 1: Patented cold drawn unalloyed spring steel wire*

EN 10270-3, *Steel wire for mechanical springs — Part 3: Stainless spring steel wire*

ISO 2768-1, *General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications*

ISO 8080, *Aerospace — Anodic treatment of titanium and titanium alloys — Sulfuric acid process*

SAE AMS 2700, *Passivation of corrosion resistant steels*²⁾

¹⁾ Published as ASD-STAN Prestandard at the date of publication of this standard (www.asd-stan.org).

²⁾ Published by: Society of Automotive Engineers (SAE), 400 Commonwealth Drive, Warrendale, PA 15096-0001, USA

SAE AMS 5528, *Steel, corrosion resistant, sheet, strip and plate, 17Cr-7.1Ni-1.1Al, solution heat treated, precipitation hardenable*²⁾

SAE AS 8879, *Screw threads — UNJ profile, inch controlled radius root with increased minor diameter*²⁾

MIL-DTL-83488, *Coating, aluminium, high purity*³⁾

MIL-PRF-46010, *Lubricant, solid film, heat cured, corrosion inhibiting*³⁾

3 Requirements

3.1 Configuration, dimensions and tolerances

The configuration, dimensions and tolerances shall conform with Figure 1.

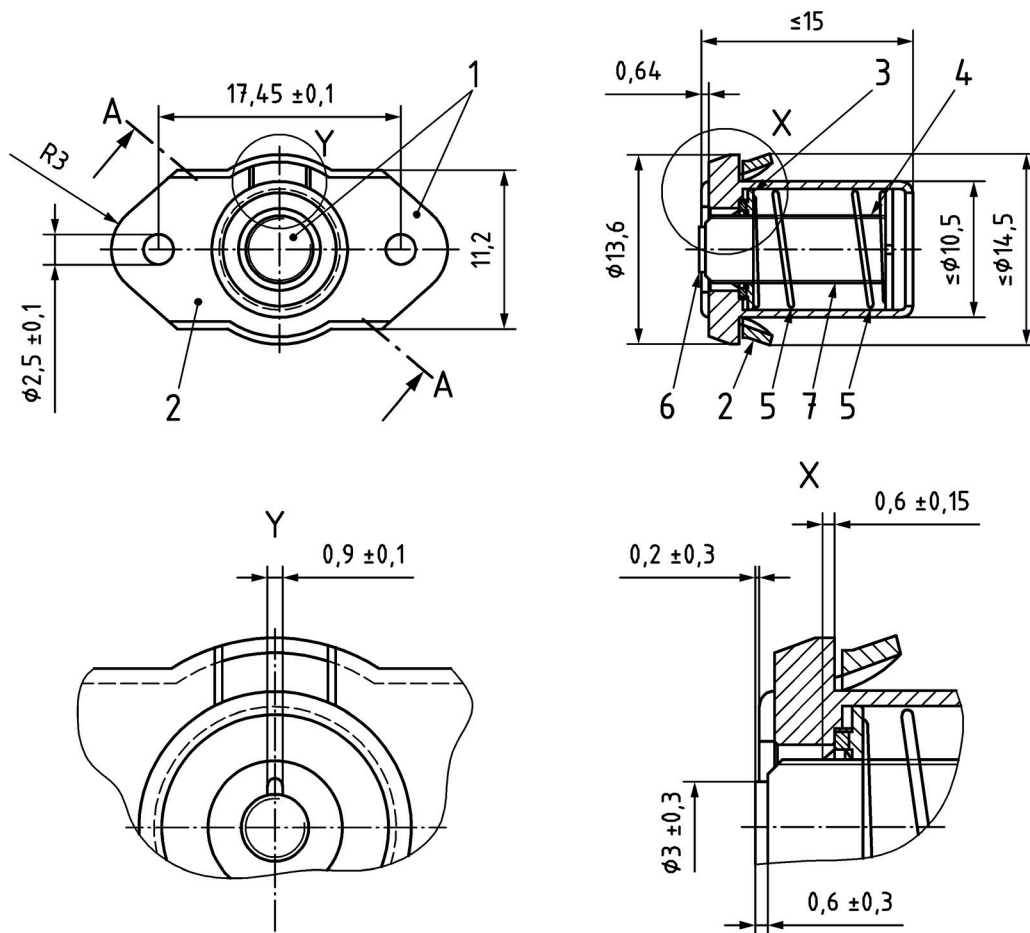
Dimensions and tolerances are expressed in millimetres.

Tolerances not specified shall be in accordance with ISO 2768-1 (Tolerance class: ISO 2768-m).

All dimensions and tolerances apply after surface treatment.

All burrs to be removed/sharp edges to be broken.

³⁾ Published by: Department of Defense (DoD), the Pentagon, Washington, D.C., 20307, USA.



Key

- 1 Marking, see Clause 5
 - 2 Plate Part A
 - 3 Washers
 - 4 Cap
 - 5 Springs
 - 6 Screw
 - 7 Thread per AS 8879, 8-32UNC-3A, 2 lead
- } Barrel Part B

Figure 1 — Configuration, dimensions and tolerances

3.2 Material and surface treatment

See Table 1.

Table 1 — Material and surface treatment

Dash number	Finish code	Element	Material	Finish	Lubricant
01	—	Screw	Corrosion resistant steel 1.4303 per EN 10088-3	Passivated per AMS 2700 or EN 2516	Dry film per MIL-PRF-46010 ^a
		Cap	Corrosion resistant steel 1.4404 per EN 10088-3 ^b		None
		Plate	Corrosion resistant steel per AMS 5528		
		Springs	Corrosion resistant steel 1.4310 per EN 10270-1 or EN 10270-3		
		Washers	Corrosion resistant steel per AMS 5528		Dry film per MIL-PRF-46010
01	V	Screw	Corrosion resistant steel 1.4303 per EN 10088-3	—	Dry film per MIL-PRF-46010 ^a
		Cap	Corrosion resistant steel 1.4404 per EN 10088-3 ^b	IVD coating per MIL-DTL-83488 type II, class 3	None
		Plate	Corrosion resistant steel per AMS 5528		
		Springs	Corrosion resistant steel 1.4310 per EN 10270-1 or EN 10270-3	—	
		Washers	Corrosion resistant steel per AMS 5528		Dry film per MIL-PRF-46010
02	S	Screw	Corrosion resistant steel 1.4303 per EN 10088-3	Passivated per AMS 2700 or EN 2516	Dry film per MIL-PRF-46010 ^a
		Cap	Titanium alloy 3.7035 per DIN 17850	Anodized per EN 2808 or ISO 8080	None
		Plate	Corrosion resistant steel per AMS 5528	Passivated per AMS 2700 or EN 2516	
		Springs	Corrosion resistant steel 1.4310 per EN 10270-1 or EN 10270-3		
		Washers	Corrosion resistant steel per AMS 5528		Dry film per MIL-PRF-46010
^a At manufacturer's discretion. ^b Carbon content of 0,3 % max. permitted after sintering process.					

3.3 Mass

See Table 2.

Table 2 — Mass

Dash number	Finish code	Mass (Ref.) kg/1 000 pieces
01	—	6,7
01	V	6,7
02	S	5,17

3.4 Floatability

Minimum floatability: 0,64 mm radially from center

3.5 Static values

Maximum axial tensile load: 6 000 N

Locking torque: 2,8 Nm – 3,2 Nm

3.6 Operating temperature

This receptacle shall be used in the temperature range of –55 °C to 150 °C.

3.7 Procurement codes

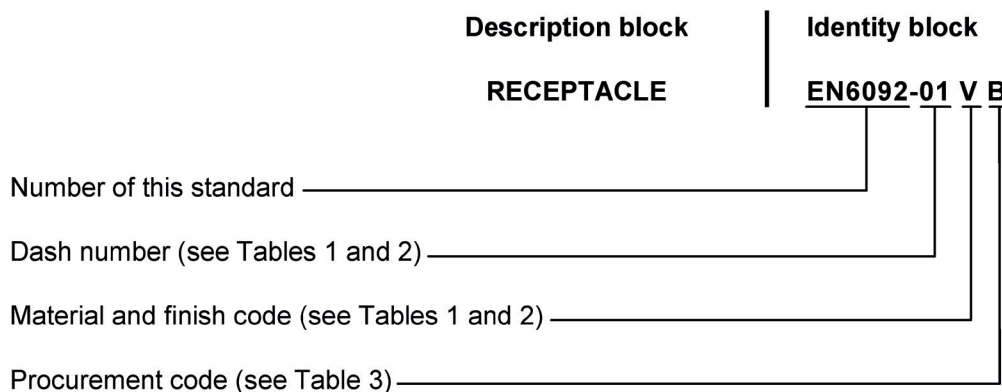
Receptacles may be procured as separate parts as shown in Table 3. The bags shall be identified with a label carrying the part designation.

Table 3 — Procurement codes for EN 6092

Procurement Code	Part	Quantity supplied per bag
No. Code	Plate and Barrel assembly (Parts A and B on Figure 1)	50
A	Plate (Part A on Figure 1)	50
B	Barrel assembly (Part B on Figure 1)	50

4 Designation

EXAMPLE



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

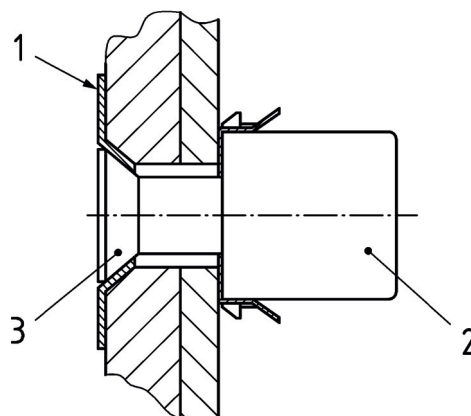
5 Marking

EN 2424, style F.

6 Technical specification

EN 6095.

7 Example of installation



Key

- 1 Washer per EN 6094
- 2 Receptacle per EN 6092
- 3 Stud per EN 6088 or EN 6105

NOTE Retaining washer EN 6090 or retaining washer EN 6089 and circlip EN 6091 respectively not shown. Refer to relevant standard for details of installation.

Figure 2 — Example of installation

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