

BS EN 3707:2012



BSI Standards Publication

Aerospace series — Headless threaded plugs — Installation holes

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National foreword

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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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EUROPEAN STANDARD

EN 3707

NORME EUROPÉENNE

EUROPÄISCHE NORM

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English Version

Aerospace series - Headless threaded plugs - Installation holesSérie aérospatiale - Bouchons filetés, sans tête - Trous
d'implantationLuft- und Raumfahrt - Verschlusschraube ohne Kopf -
Einbaulöcher

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Foreword

This document (EN 3707:2012) 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.

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1 Scope

This European Standard specifies the dimensions of the installation holes for headless plugs to EN 3706 for sealing drilled fluid systems. The maximum operating temperature is 200 °C.

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 3706, *Aerospace series — Headless threaded plugs, cross recess, in aluminium alloy 5086*¹⁾

ISO 5855-1, *Aerospace — MJ Threads — Part 1: General requirements*

3 Required characteristics

3.1 Configuration — Dimensions — Tolerances

Configuration: See figure 1.

Dimensions and tolerances:

- See figure 1 and table 1.
- Dimensions are in millimetres.

3.2 Profile trimming

The plug is fitted in recess with respect to the surface and the profile does not need to be trimmed except when the plugging concerns the air duct surface.

1) Published as ASD-STAN pre-standard at the date of publication of the present standard.

4 Installation

4.1 Hole dimension

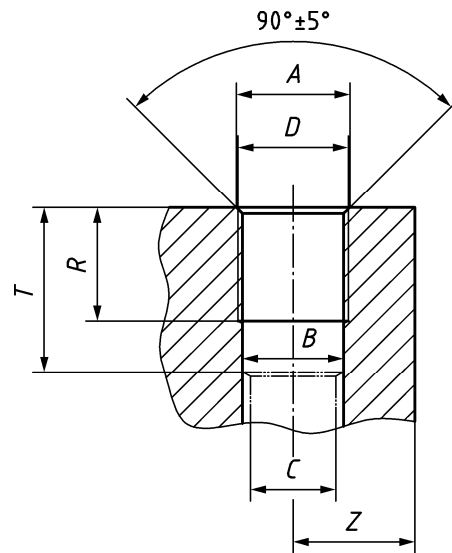


Figure 1

Table 1

Dia. code	$\varnothing D^a$	$\varnothing A$ +0,2 0	$\varnothing B$	Tol H11	R	Tol	t^b	Tol	Z^c mini
060	MJ6×1,00 – 4g5g	6	4,9	+0,075 0	6	+1,5 0	10,50	+1,5 0	8
070	MJ7×1,00 – 4g5g	7	5,9		7		11,50		9
080	MJ8×1,00 – 4g5g	8	6,9	+0,090 0	8		12,50		9,5
100	MJ10×1,00 – 4g5g	10	8,9		10		14,50		10,7
120	MJ12×1,00 – 4g5g	12	10,4	+0,110 0	12	+2,25 0	18,75	+2,25 0	11,7
140	MJ14×1,00 – 4g5g	14	14,4		14		20,75		13
160	MJ16×1,00 – 4g5g	16	14,4		16		22,75		14
180	MJ18×1,00 – 4g5g	18	16,4		18		24,75		15
200	MJ20×1,00 – 4g5g	20	18,4	+0,130 0	20		26,75		16

^a Basic profile is in conformity with ISO 5855-1.

^b Use when the \varnothing of the duct $\varnothing C < \varnothing$ of the tapping pilot hole $\varnothing B$ (use only when strictly necessary).

^c To allow repair with a plug the next size up.

4.2 Special location conditions

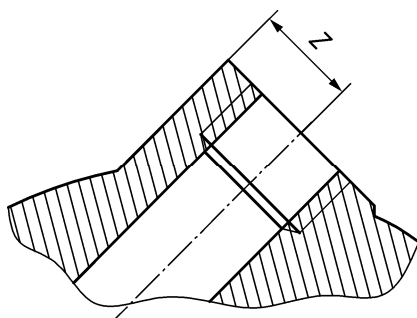


Figure 2

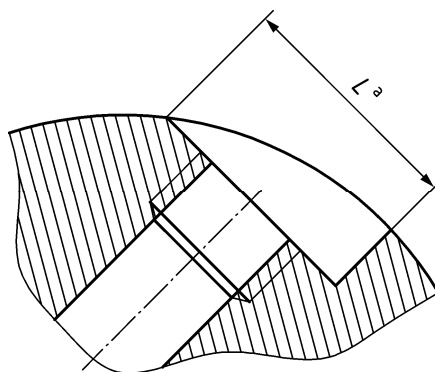
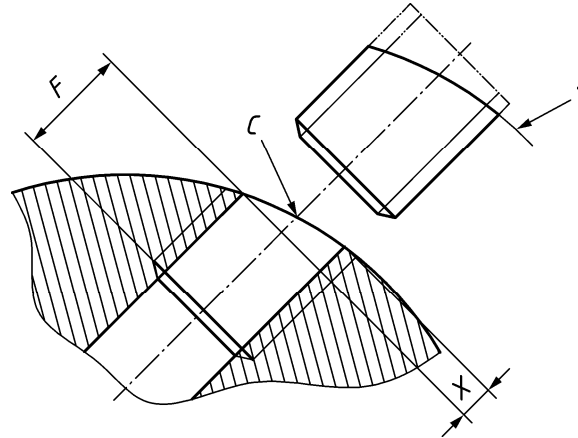


Figure 3

In the case of oblique drilling on a flat or distorted surface, the material thickness surrounding the plug shall permit the use of a repair plug the next size up.



Key

- 1 Trimming after installation

Figure 4

The solution in Figure 4 shall remain exceptional and if possible having $F + X \leq R$. The dimension F shall be such that the plug has, at least, 4 complete threads in the receptacle.

In this case, to avoid a protrusion, the plug shall be machine flushed.

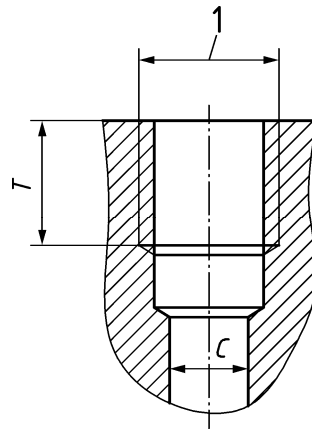
5 Designation

EXAMPLE

	Description block	Identity block
	Installation hole	EN3707-060
Number of this standard		
Diameter code (see Table 1)		

NOTE If necessary, the originator code 19005 shall be placed between the description block and the identity block.

6 Indications on drawings — Examples



Key

1 Installation hole EN 3707-080

Figure 5

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