

**Aerospace series —  
Holes for 100°  
countersunk head  
screws — Design  
standard**

ICS 49.030.01

## National foreword

This British Standard is the UK implementation of EN 3782:2008.

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	Comments

English Version

## Aerospace series - Holes for 100° countersunk head screws - Design standard

Série aérospatiale - Trous pour vis à tête fraisée 100° -  
Norme de conception

Luft- und Raumfahrt - Löcher für 100° -Senkschrauben -  
Konstruktionsnorm

This European Standard was approved by CEN on 3 November 2007.

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## Foreword

This document (EN 3782:2008) 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 standard specifies holes in common parts and sheet metal for 100° countersunk head screws with nominal diameters of 3 mm to 5 mm and head configuration according to EN standards for aerospace applications.

## 2 Use

### 2.1 Normal application

Underflush condition, i. e. where units are mounted on top of the screws, use dimensions  $P_1$  (see Table 1).

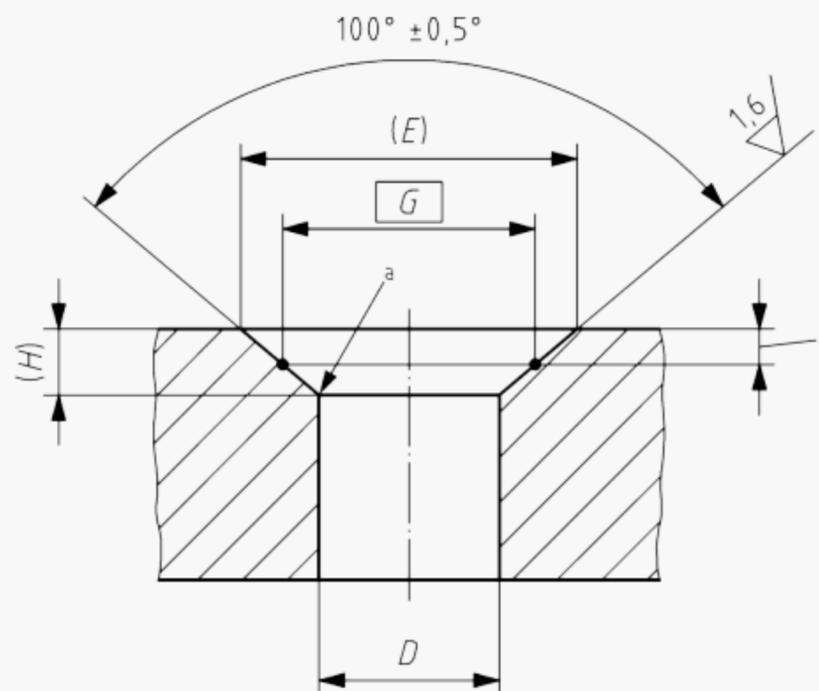
### 2.2 Aerodynamic application

Proud to underflush condition i.e. where the screws are adjacent to gaseous flow, use dimensions  $P_2$  (see Table 2).

## 3 Required characteristics

See Figures 1 and 2 and Tables 1 and 2.

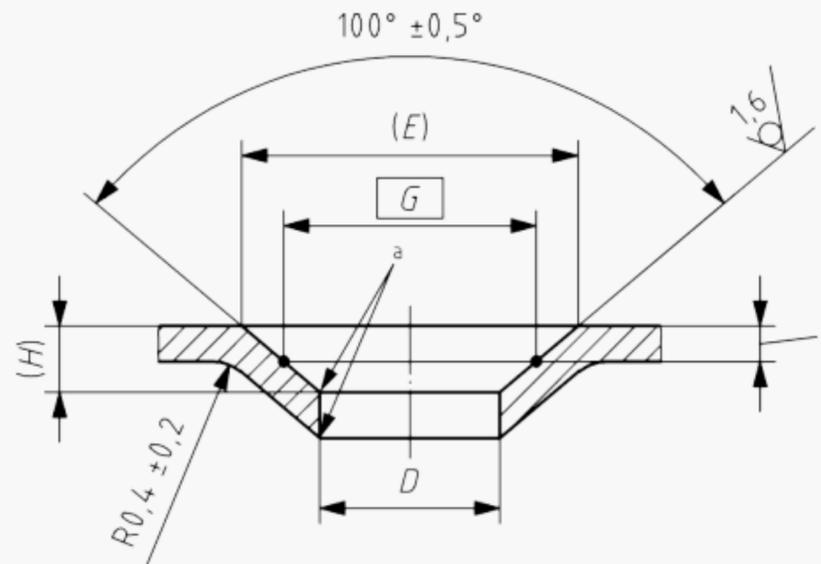
Dimensions in millimetres



- a deburred 0,1 to 0,5
- b  $P_1$  underflush condition  
 $P_2$  proud to underflush condition

Figure 1 — Countersunk holes in common parts

Dimensions in millimetres



- a deburred 0,1 to 0,5  
 b  $P_1$  underflush condition  
 $P_2$  proud to underflush condition

Figure 2 — Countersunk holes in sheet metal

Table 1 — Hole sizes for normal application (underflush condition)

diameter code	Screw thread designation	Hole diameter	Sinking diameter	Gauge diameter	Depth	$P_1$
		$\varnothing D$ mm tol. H13	$\varnothing E^a$ mm	$\varnothing G$ mm	$H^a$ mm	0,10 to 0,38 underflush mm
N030	MJ3 × 0,5 – 4h 6h	3,3 + 0,18	6,2	4,50	1,2	0,73 + 0,2
N040	MJ4 × 0,7 – 4h 6h	4,4 + 0,18	8,2	5,78	1,6	1,03 + 0,2
N050	MJ5 × 0,8 – 4h 6h	5,5 + 0,18	10,2	7,71	2,0	1,06 + 0,2

a For information only.

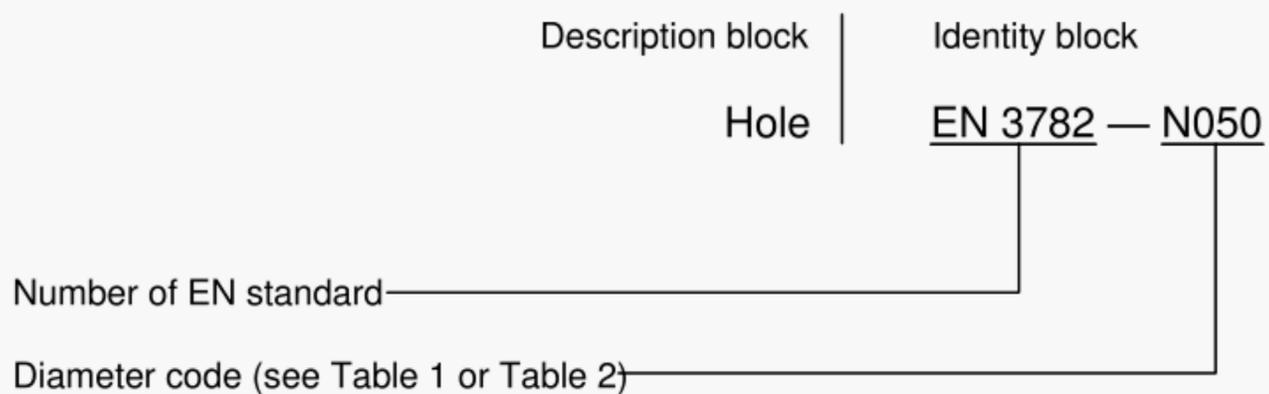
Table 2 — Hole sizes for aerodynamic application (proud to underflush condition)

diameter code	Screw thread designation	Hole diameter	Sinking diameter	Gauge diameter	Depth	$P_2$
		$\varnothing D$ mm tol. H13	$\varnothing E^a$ mm	$\varnothing G$ mm	$H^a$ mm	0,10 proud to 0,13 underflush mm
A030	MJ3 × 0,5 – 4h 6h	3,3 + 0,18	5,75	4,50	1,0	0,53 + 0,15
A040	MJ4 × 0,7 – 4h 6h	4,4 + 0,18	7,75	5,78	1,4	0,83 + 0,15
A050	MJ5 × 0,8 – 4h 6h	5,5 + 0,18	9,75	7,71	1,8	0,86 + 0,15

a For information only.

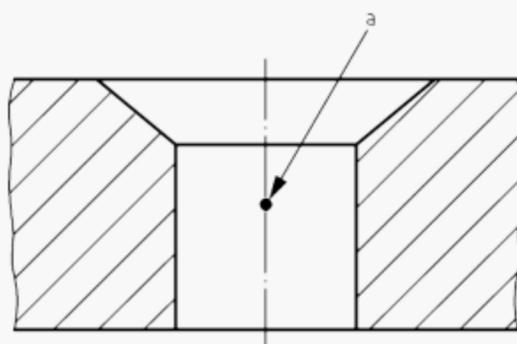
## 4 Designation

EXAMPLE



## 5 Indication in drawings

EXAMPLE



a Hole EN 3782-N050

**Figure 3 — Indication in drawings**

Alternatively the hole may be fully dimensioned in the drawing.



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