

This is a preview of "BS EN 4852:2019". [Click here to purchase the full version from the ANSI store.](#)



BSI Standards Publication

**Aerospace series - External spiral drive heads
for threaded fasteners - Geometrical definition
and fastener head wrenching configuration**

This is a preview of "BS EN 4852:2019". [Click here to purchase the full version from the ANSI store.](#)

National foreword

This British Standard is the UK implementation of EN 4852:2019.

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.

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

© The British Standards Institution 2019
Published by BSI Standards Limited 2019

ISBN 978 0 539 01695 6

ICS 49.030.20

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 30 June 2019.

Amendments/corrigenda issued since publication

Date	Text affected
------	---------------

This is a preview of "BS EN 4852:2019". Click here to purchase the full version from the ANSI store.

EUROPÄISCHE NORM

May 2019

ICS 49.030.20

English Version

Aerospace series - External spiral drive heads for threaded fasteners - Geometrical definition and fastener head wrenching configuration

Série aérospatiale - Têtes à entraînement extérieur en spirale pour éléments de fixation filetés - Définition géométrique et configuration de serrage de la tête de fixation

Luft- und Raumfahrt - Spiral-Außenantrieb für Schrauben - Definition der Geometrie und Gestaltung des Schlüsselangriffs

This European Standard was approved by CEN on 12 November 2018.

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-CENELEC 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-CENELEC 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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

This is a preview of "BS EN 4852:2019". [Click here to purchase the full version from the ANSI store.](#)

Contents

	Page
European foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative references.....	5
3 Terms and definitions	5
4 Required characteristics: Configuration — Dimensions — Tolerances.....	5
4.1 Geometrical product specifications (GPS)	6
5 Designation.....	8
6 Configuration gauging	8
6.1 Types of gauge.....	8
6.1.1 GO Ring gauge.....	8
6.1.2 NO-GO Ring gauge	8
6.1.3 Fallaway gauge.....	10
6.1.4 Fallaway root step GO-gauge.....	10
6.1.5 Fallaway cylindrical GO-gauge	11
6.1.6 Fallaway cylindrical step gauge.....	11

This is a preview of "BS EN 4852:2019". [Click here to purchase the full version from the ANSI store.](#)

European foreword

This document (EN 4852:2019) 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 November 2019, and conflicting national standards shall be withdrawn at the latest by November 2019.

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.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a preview of "BS EN 4852:2019". [Click here to purchase the full version from the ANSI store.](#)

Introduction

Aerospace and Defence Standardisation (ASD-STAN) draws attention to the fact that it is claimed that compliance with this document may involve the use of a patent "Spiral Drive System for Threaded Fasteners" EP1025370B1.

ASD-STAN takes no position concerning the evidence, validity and scope of this patent right.

The holder of this patent right has assured ASD-STAN that he/she is willing to negotiate licences under reasonable and non-discriminatory terms and conditions with applicants throughout the world. In this respect, the statement of the holder of this patent right is registered with ASD-STAN. Information may be obtained from:

Phillips Screw Company
301 Edgewater Drive, Suite 320
Wakefield, MA 01880
USA

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights other than those identified above. ASD-STAN shall not be held responsible for identifying any or all such patent rights.

This is a preview of "BS EN 4852:2019". Click here to purchase the full version from the ANSI store.

1 Scope

This European standard specifies dimensions and gauging system for external MORTORQ super bolt head spiral drive system¹.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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.

ISO 1101, *Geometrical product specifications (GPS) — Geometrical tolerancing — Tolerances of form, orientation, location and run-out*

3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <http://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

4 Required characteristics: Configuration — Dimensions — Tolerances

Configuration shall be in accordance with Figure 1.

Dimensions and tolerances shall conform with Figure 1 and Table 1 and are expressed in millimetres.

¹ External MORTORQ[®] Super is the trade name of a product supplied by licensees of the Phillips Screw Company. This information is given for the convenience of users of this European Standard and does not constitute an endorsement by ASD-STAN nor CEN of the product named. Equivalent products may be used if they can be shown to lead to the same results.