

Specification for

Design and performance requirements for toggle type panel fasteners

UDC 629.7:621.828.2

Confirmed
February 2012

NO COPYING WITHOUT BSI PERMISSION EXCEPT AS PERMITTED BY COPYRIGHT LAW



Document Sharing Hub

Foreword

This British Standard has been prepared at the request of the Society of British Aerospace Companies Limited. It specifies the requirements for design and performance of toggle type panel fasteners for aircraft.

NOTE Information concerning SI units is given in BS 350, “Conversion factors and tables”, Part 2, “Detailed conversion tables”, Supplement No. 1, “Additional tables for SI conversions”, and PD 5686, “The use of SI units”.

This standard makes reference to the following British Standards:

BS 410, *Test sieves*.

BS 2011, *Methods of environmental testing of electronic components and electronic equipment. Part 2K. Salt mist*.

BS SP 20, *Panel type air filter elements for use with internal combustion engines and compressors on aircraft*.

A British Standard does not purport to include all the necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, pages 1 to 7 and a back cover.

This standard has been updated (see copyright date) and may have had amendments incorporated. This will be indicated in the amendment table on the inside front cover.

Amendments issued since publication

Amd. No.	Date	Comments

This British Standard, having been approved by the Aerospace Industry Standards Committee, was published under the authority of the Executive Board of the Institution on 31 March 1970

© BSI 02-2000

The following BSI reference relates to the work on this standard:
Committee reference ACE/14
Draft for comment 69/1719

ISBN 0 580 05867 0

Contents

	Page
Foreword	Inside front cover
1 General	1
1.1 Scope	1
1.2 Definition	1
1.3 Materials	1
1.4 Protective treatment	1
2 Design requirements	1
2.1 General	1
2.2 Interchangeability	1
2.3 Operation	1
2.4 Flush fitting	1
2.5 Capacity	1
2.6 Adjustment	2
2.7 Fitting tolerances	2
2.8 Shear type fasteners	2
3 Type tests	2
3.1 General	2
3.2 Tensile proof tests	2
3.3 Torsion proof tests	3
3.4 Tensile ultimate loads	3
3.5 Adjustment tests	3
3.6 Endurance test	3
3.7 Depth tolerance test	3
3.8 Malalignment test	3
3.9 Fluctuating load test	3
3.10 Operating test	4
3.11 Resistance to corrosion	4
3.12 Shear type fasteners	4
Appendix A Test schedule	6
Appendix B Dust and sand test	6
Figure 1 — Measuring device for dust and sand tests	7
Table 1 — Ultimate tensile loads	5
Table 2 — Maximum operating loads	5
Table 3 — Minimum range of adjustment	5
Table 4 — Ultimate shear loads	5
Table 5 — Test schedule	6

