

Woven polyester narrow fabrics for aerospace purposes

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Committees responsible for this British Standard

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British Narrow Fabrics Association
Ministry of Defence
Society of British Aerospace Companies

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Foreword

This British Standard, prepared under the direction of Technical Committee ACE/21, Narrow woven fabrics for aerospace use, is one of a series for textiles of a quality suitable for aerospace purposes and constitutes a new edition of BS 2F 129:1991, which is withdrawn. It specifies the requirements for a series of polyester narrow fabrics for use primarily in parachutes, life saving equipment and aircrew protective clothing.

It differs from the previous edition in that minimum breaking strengths for some fabrics have been increased (see Table 3).

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its 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 11 and a back cover.

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1 Scope

This British Standard specifies requirements for woven polyester (polyethylene terephthalate) narrow fabrics for aerospace purposes.

NOTE 1 The titles of the publications referred to in this standard are listed on the inside back cover.

NOTE 2 The latest revision of an Aerospace Series standard is indicated by a prefix number.

NOTE 3 The information to be supplied by the purchaser in the contract or order is listed in Annex A.

2 General requirements

In addition to the requirements specified in Clauses 3, 4, 5, 6 and 7 of this standard, the requirements and tests of the latest edition of BS F 100 specified in Table 1 shall apply.

3 Yarn

3.1 Type

The fabric shall be manufactured from bright, continuous filament, polyester (polyethylene terephthalate) yarn.

3.2 Construction

3.2.1 The yarn shall have the nominal construction given in Table 2.

3.2.2 The tolerances on twist shall be $\pm 20\%$.

3.2.3 The direction of twist in all fabric designations shall be either all S or all Z. There shall not be different twist directions in the fabric.

4 Manufacture

4.1 The fabric shall be woven either:

- a) on a shuttle loom; or
- b) on a shuttleless loom where this is in accordance with the appropriate yarn designation as given in Table 2 (see also 4.2).

NOTE The type of weaving required should be specified in the purchaser's contract or order (see Annex A), but for supply against this British Standard the two types of weaving are considered to be technically equivalent and either may be supplied.

4.2 Shuttleless construction shall not be used unless the appropriate yarn designation as given in Table 2 is required and, if such a yarn is required, the shuttleless construction shall be one of the following:

- a) with spool type interlocking in the body of the fabric (see Figure 1 for guidance); or
- b) with the weft knitted with one locking thread (see Figure 2 for guidance); or
- c) with the weft secured by two knitted locking threads (see Figure 3 for guidance).

4.3 The knitted edge of shuttleless constructions complying with 4.2 b) and c) shall be uniform and even. The edge shall be pulled closely into the body of the fabric to avoid beading.

4.4 Fabric designation 267 shall have a black identifying yarn positioned centrally down the fabric and this shall be included in the total warp ends.