

This document is not an ASTM standard and is intended only to provide the user of an ASTM standard an indication of what changes have been made to the previous version. Because it may not be technically possible to adequately depict all changes accurately, ASTM recommends that users consult prior editions as appropriate. In all cases only the current version of the standard as published by ASTM is to be considered the official document.



Designation: D 3693 – 91 (Reapproved 1996)^{€1}



Designation: D 3693 – 02

Standard Specification for Labeled Length per Holder of Sewing Thread¹

This standard is issued under the fixed designation D 3693; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

^{ε1} ~~Note~~—Editorial changes were made throughout in November 1996.

¹ This specification is under the jurisdiction of ASTM Committee D13 on Textiles and is the direct responsibility of Subcommittee D13.58 on Yarn Test Methods, General. Current edition approved July 15, 1991; Sept. 10, 2002. Published September 1991; November 2002. Originally published as D 3693 – 78. Last previous edition D 3693 – 8091 (Reapproved 1985) 1996^{ε1}.

1. Scope

1.1 This specification covers requirements for the labeled lengths of sewing threads of all materials.

2. Referenced Documents

2.1 *ASTM Standards:*

D 123 Terminology Relating to Textiles²

D 204 Methods of Testing Sewing Threads²

D 3888 Terminology Related to Open-End Spinning³

D 3990 Terminology Relating to Fabric Defects³

D 4849 Terminology Relating to Fibers and Yarns³

3. Terminology

3.1 *Definitions:*

3.1.1 For definitions of textile terms used in this specification, thread holder, ~~n—the support package on which and~~ sewing yarn is wound.

3.1.1.1 *Discussion*—This support package enables sewing yarn thread, refer to be securely placed for subsequent transportation, storage, and utilization. These support packages may be in the form of a cone, spool, tube, or bobbin.

3.1.2 *sewing thread, n*—a flexible small-diameter yarn or strand, usually treated with a surface coating, lubricant, or both, intended to be used to stitch one or more pieces of material or an object to a material.

3.1.3 For definitions of Terminology D 4849.

3.1.2 For other textile terms used in this specification, refer to Terminology standards D 123, D 3888, D 3990, And D 4849.

4. Requirements

4.1 The average for all holders shall equal or exceed the labeled length.

4.2 For home sewing spools, the observed length of individual holders shall equal or exceed the percent of labeled length shown in Table 1.

4.3 For ready-made bobbins, the observed length of individual holders shall equal or exceed 97 % of the labeled length.

² Annual Book of ASTM Standards, Vol 07.01.

³ Annual Book of ASTM Standards, Vol 07.02.

TABLE 1 Minimum Length for Individual Home Sewing Spools

Labeled Length, m	Minimum % Allowed
0 to 40	98.5
Over 40 to 85	98
Over 85 to 140	97.5
Over 140 to 300	97
Over 300 to 1000	96
Over 1000	95

4.4 For all other holders, when the sample size is nine or fewer, the observed length of individual holders shall equal or exceed 95 % of the labeled length. For a sample size of ten or more the observed length of one holder may be less than 95 % of the labeled length.

4.5 If the initial sample consists of fewer than ten holders and the average length measured fails to conform to the requirements of 4.1 but meets those of 4.2, 4.3, or 4.4, as appropriate, take additional specimens from the lot and test until a total of ten have been measured. Reevaluate the results of these ten specimens against the requirements of 4.1, 4.2, 4.3, or 4.4, as appropriate. If the new average conforms with the requirements of 4.1 and the individual holders with the requirements of 4.2, 4.3, or 4.4, as appropriate, consider the lot acceptable.

4.5.1 If the original lot consists of fewer than ten holders, the supplementary sample will be one half of the holders remaining in the lot following the initial sampling.

5. Sampling

5.1 *Lot*—Unless otherwise agreed upon between the purchaser and supplier, a lot shall be a discrete manufacturing unit or a billed quantity of a specific color, ticket size, and length put-up of thread. A billed quantity can consist of a single unit, a carton, box, or multiple units of either, containing a number of holders of thread.

NOTE 1—An adequate specification or other agreement between the purchaser and the supplier requires taking into account variability between shipping units, between packages, or ends within shipping unit, and between specimens from a single package so as to provide a sampling plan with a meaningful producer’s risk, user’s risk, acceptable quality level, and limiting quality level.

5.2 *Sample*—Unless otherwise agreed upon between the purchaser and ~~seller~~, supplier, and except for ready-made bobbins, the sample, chosen at random, shall be 10 % of the holders in the lot, with a minimum of one holder, up to a maximum of ten holders. The lot sample and laboratory sample are synonymous.

5.2.1 For ready-made bobbins the sample shall be as shown in Table 2.

5.3 *Specimen*—The test specimen is a holder of thread whether a cone, tube, spool, ready-made bobbin, or other.

6. Test Method

6.1 Determine the length of each holder of thread as directed in the length per thread holder procedure of Test Method D 204. Use the sampling directions in this specification in place of those in Methods D 204.

7. Conformance

7.1 Material that fails to conform to the requirements of this specification may be rejected. Rejection shall be reported to the supplier promptly and in writing. In case of dissatisfaction with the results of the test, the supplier may make claim for a rehearing. The terms of the rehearing shall be as agreed upon between the supplier and the purchaser.

8. Keywords

8.1 length; sewing thread

ASTM International takes no position respecting the validity of any patent rights asserted in connection with any item mentioned in this standard. Users of this standard are expressly advised that determination of the validity of any such patent rights, and the risk of infringement of such rights, are entirely their own responsibility.

This standard is subject to revision at any time by the responsible technical committee and must be reviewed every five years and if not revised, either reapproved or withdrawn. Your comments are invited either for revision of this standard or for additional standards and should be addressed to ASTM International Headquarters. Your comments will receive careful consideration at a meeting of the responsible technical committee, which you may attend. If you feel that your comments have not received a fair hearing you should make your views known to the ASTM Committee on Standards, at the address shown below.

This standard is copyrighted by ASTM International, 100 Barr Harbor Drive, PO Box C700, West Conshohocken, PA 19428-2959, United States. Individual reprints (single or multiple copies) of this standard may be obtained by contacting ASTM at the above address or at 610-832-9585 (phone), 610-832-9555 (fax), or service@astm.org (e-mail); or through the ASTM website (www.astm.org).

TABLE 2 Sampling Plan for Ready-Made Bobbins

Lot Size, gross	Sample Size
10 or less	10 bobbins
11 through 99	1 bobbin per gross
100 or more	100 bobbins