

Transformé

ISO

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION

ISO RECOMMENDATION

R 1859

UNRECORDED MAGNETIC TAPES
FOR INTERCHANGE INSTRUMENTATION APPLICATIONS
GENERAL DIMENSIONAL REQUIREMENTS

1st EDITION

May 1971

COPYRIGHT RESERVED

The copyright of ISO Recommendations and ISO Standards belongs to ISO Member Bodies. Reproduction of these documents, in any country, may be authorized therefore only by the national standards organization of that country, being a member of ISO.

For each individual country the only valid standard is the national standard of that country.

Printed in Switzerland

Also issued in French and Russian. Copies to be obtained through the national standards organizations.

BRIEF HISTORY

The ISO Recommendation R 1859, *Unrecorded magnetic tapes for interchange instrumentation applications – General dimensional requirements*, was drawn up by Technical Committee ISO/TC 97, *Computers and information processing*, the Secretariat of which is held by the American National Standards Institute (ANSI).

Work on this question led to the adoption of Draft ISO Recommendation No. 1859, which was circulated to all the ISO Member Bodies for enquiry in April 1970. It was approved, subject to a few modifications of an editorial nature, by the following Member Bodies :

Australia	Japan	Sweden
Belgium	New Zealand	Switzerland
Czechoslovakia	Portugal	Thailand
France	Romania	United Kingdom
Greece	South Africa, Rep. of	U.S.A.
Italy	Spain	U.S.S.R.

The following Member Body opposed the approval of the Draft :

Germany

This Draft ISO Recommendation was then submitted by correspondence to the ISO Council, which decided to accept it as an ISO RECOMMENDATION.

FOREWORD

An inter-related series of ISO Recommendations is in preparation in the field of instrumentation recording.

The series covers :

- reels;
- unrecorded magnetic tape;
- recorded magnetic tape;
- recording methods;
- vocabulary.

This ISO Recommendation is part of that series and should be read accordingly.

UNRECORDED MAGNETIC TAPES
FOR INTERCHANGE INSTRUMENTATION APPLICATIONS
GENERAL DIMENSIONAL REQUIREMENTS

1. SCOPE

This ISO Recommendation specifies the materials, the tape wind, and the dimensions of magnetic tape used in interchange instrumentation applications.

2. MATERIALS

The tape is to consist of a suitable, continuous and splice-free base material coated on one side with a durable, yet flexible layer of ferromagnetic material.

3. TAPE WIND

- 3.1 The tape shall be wound on hubs or reels complying with the specifications for precision reels or general purpose hubs and reels stated in ISO Recommendations R 1860, *Precision reels for magnetic tape used in interchange instrumentation applications*, and R 1858, *General purpose hubs and reels, with 76 mm (3 in) centrehole, for magnetic tape used in interchange instrumentation applications*.

NOTE. - Smaller reels with 8 mm (5/16 in) centre holes are under consideration.

- 3.2 The tape shall be wound with the magnetic coated surface facing the hub of the reel.

4. DIMENSIONS**4.1 Standard widths**

The standard widths shall be as listed in Table 1.

TABLE 1

Standard widths	
millimetres	inches
6.25 ± 0.05	0.246 ± 0.002
12.70 ⁰ / _{-0.10}	0.500 ⁰ / _{-0.004}
* 19.05 ⁰ / _{-0.10}	* 0.750 ⁰ / _{-0.004}
25.40 ⁰ / _{-0.10}	1.000 ⁰ / _{-0.004}
50.80 ⁰ / _{-0.10}	2.000 ⁰ / _{-0.004}

* Although shown in this table, this dimension is not a preferred width.

4.2 Thickness

Maximum total thickness is controlled by standard reel dimensions, length and "E" value.

NOTE. - The maximum total thickness of the base plus the coating shall not exceed 0.055 mm (0.0022 in). The nominal base thickness is given in Table 2.

4.3 Length

Tape shall be supplied in the minimum lengths given in Table 2.

4.4 "E" value

The minimum "E" value shall be 2.5 mm (0.10 in). (The "E" value is the radial distance by which the reel flanges extend beyond the outermost layer of the tape.)