
INTERNATIONAL STANDARD



1154

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Information processing — Punched paper tape — Dimensions and location of feed holes and code holes

Traitement de l'information — Dimensions et emplacement des perforations d'entraînement et des perforations de données

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FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO Member Bodies). The work of developing International Standards is carried out through ISO Technical Committees. Every Member Body interested in a subject for which a Technical Committee has been set up has the right to be represented on that Committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the Technical Committees are circulated to the Member Bodies for approval before their acceptance as International Standards by the ISO Council.

Prior to 1972, the results of the work of the Technical Committees were published as ISO Recommendations; these documents are now in the process of being transformed into International Standards. As part of this process, Technical Committee ISO/TC 97 has reviewed ISO Recommendation R 1154 and found it technically suitable for transformation. International Standard ISO 1154 therefore replaces ISO Recommendation R 1154-1969 to which it is technically identical.

ISO Recommendation R 1154 was approved by the Member Bodies of the following countries :

Australia	Germany	Spain
Belgium	Greece	Sweden
Brazil	Italy	Switzerland
Canada	Japan	Thailand
Czechoslovakia	Netherlands	United Kingdom
Denmark	New Zealand	U.S.A.
Egypt, Arab Rep. of	Poland	
France	Romania	

No Member Body expressed disapproval of the Recommendation.

No Member Body disapproved the transformation of ISO/R 1154 into an International Standard.

Information processing — Punched paper tape — Dimensions and location of feed holes and code holes

1.1 SCOPE AND FIELD OF APPLICATION

1.1 This International Standard specifies the dimensions and location of feed holes and code holes in punched paper tape for data interchange.

1.2 It applies to punched paper tape with fully punched round holes.

1.3 Only paper tape with a nominal width of 25,4 mm (1.0 in) is covered in this International Standard.

NOTE — The properties of the unpunched paper tape and the implementation of the ISO codes on the paper tape are the respective subjects of ISO 1729, *Information processing — Unpunched paper tape — Specification*, and ISO 1113, *Information processing — Representation of 6- and 7-bit coded character sets on punched tape*.

2 REFERENCE EDGE

2.1 The reference edge of the tape shall be that with *three* data tracks between it and the feed track.

If tape is guided from one edge, the reference edge shall be used as the guide edge.

3 DIMENSIONS AND POSITIONS OF HOLES

3.1 Centre line of feed hole track to reference edge

Nominal :	9,96 mm	(0.392 in)
Tolerance :	± 0,10 mm	(± 0.004 in)

3.2 Feed hole diameter

Nominal :	1,17 mm	(0.046 in)
Tolerance :	+ 0,05 − 0,025 mm	$\left(\begin{array}{l} + 0.002 \\ - 0.001 \end{array} \text{ in} \right)$

3.3 Code hole diameter

Nominal :	1,83 mm	(0.072 in)
Tolerance :	± 0,05 mm	(± 0.002 in)

3.4 Track positioning

If a line is drawn through the centres of the feed holes, then the distance of the centres of the code holes from this line shall be

$$2,54 n \pm 0,05 \text{ mm} \quad (0.100 n \pm 0.002 \text{ in})$$

where n is an integer.

3.5 Row positioning

The nominal distance between two adjacent rows shall be

$$2,54 \text{ mm} \quad (0.100 \text{ in})$$

The tolerance on alignment of code holes in any one transverse row, relative to the centre line of the feed hole perpendicular to the reference edge in that row, shall be

$$\pm 0,075 \text{ mm} \quad (\pm 0.003 \text{ in})$$

3.5.1 Adjacent feed holes

Tolerance on distance between centres of adjacent feed holes shall be

$\pm 0,075$ mm (± 0.003 in)

3.5.2 Cumulative longitudinal error along the feed track

The permissible spacing error along the feed track between centres of feed holes shall not exceed

a) $\pm 0,25$ mm (± 0.010 in)

in any span up to 10 spaces, i.e. 25,4 mm (1.000 in).

b) $\pm 0,63$ mm (± 0.025 in)

in any span up to 50 spaces, i.e. 127,00 mm (5.000 in).

4 ENVIRONMENTAL CONDITIONS

The dimensions and tolerances given in clause 3 are to be met when punching paper tape under the following conditions :

— relative humidity : 50 ± 2 %

— temperature : 23 ± 2 °C (73 ± 3.5 °F)

It is highly desirable, for physical interchange of punched tapes, that the paper tape should be punched in an environment within the range of 40 to 60 % relative humidity.

If, however, due to uncontrollable circumstances, the relative humidity at the time of punching is above 60 % or below 40 %, it may prove necessary to make a special arrangement between the sender and the recipient in order to ensure satisfactory reading.