
INTERNATIONAL STANDARD



764

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"Antimagnetic" watches for general purpose use

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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, International Standard ISO 764 replaces ISO Recommendation R 764-1968 drawn up by Technical Committee ISO/TC 114, *Horology*.

The Member Bodies of the following countries approved the Recommendation :

Australia	Greece	Netherlands
Chile	India	New Zealand
Czechoslovakia	Ireland	Switzerland
Egypt, Arab Rep. of	Israel	Thailand
France	Italy	United Kingdom
Germany	Japan	U.S.S.R.

No Member Body expressed disapproval of the Recommendation.

"Antimagnetic" watches for general purpose use

1 SCOPE AND FIELD OF APPLICATION

This International Standard lays down the technical definition of "antimagnetic" watches for general purpose use and specifies the method for its verification.

2 DEFINITION

A watch bearing the mention "antimagnetic" – or any other similar term – shall comply with the minimum requirements specified in clause 5.

3 METHOD OF TESTING

3.1 A wrist watch shall be tested without the bracelet, unless the latter forms an integral part of the watch.

3.2 During the whole test period, the ambient temperature shall be between 18 and 25 °C and shall not vary by more than 2 °C.

3.3 The apparatus used shall produce a homogeneous and continuous magnetic field whose intensity and directions are indicated in 3.5.2.

3.4 The procedure shall be as follows :

3.4.1 Place the watch on the apparatus.

3.4.2 Successively and progressively connect and disconnect the three magnetic fields indicated in 3.5.2.

3.4.3 Carefully withdraw the watch.

3.5 Operations

3.5.1 First observation

1 h after it has been fully wound, check the rating of the watch for at least 2 min in the position CH (dial up).

3.5.2 Magnetization

Check the rating of the watch in position CH while it is subjected to a continuous magnetic field of $60 \begin{smallmatrix} 0 \\ -5 \end{smallmatrix}$ Oe or $4\,800 \begin{smallmatrix} 0 \\ -400 \end{smallmatrix}$ A/m (admitted variation $\pm 1\%$) during three successive periods of 60 s each.

3.5.2.1 In the first period, apply the magnetic field perpendicularly to the plane of the watch, in the "dial-movement" direction.

3.5.2.2 In the second period, apply the magnetic field parallel to the plane of the watch, in the "6 – 12" direction.

3.5.2.3 In the third period, apply the magnetic field parallel to the plane of the watch, in the "3 – 9" direction.

3.5.3 Second observation

15 min after the watch has been exposed to the last magnetic field, check its rating for at least 2 min in position CH.

4 RESIDUAL EFFECT

The residual effect is defined by the variation in rate observed under the conditions specified in 3.5.1 and 3.5.3.

5 MINIMUM REQUIREMENTS

The watch meets with requirements if

- it does not stop during any of the three periods of 1 min indicated in 3.5.2;
- the residual effect is not more than 30 s/d (seconds per day) when the movement has a casing-diameter exceeding 20 mm or an area exceeding 314 mm²;
- the residual effect is not more than 45 s/d when the movement has a casing-diameter not exceeding 20 mm or an area not exceeding 314 mm².