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# International Standard



# 6596/1

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INTERNATIONAL ORGANIZATION FOR STANDARDIZATION • МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ • ORGANISATION INTERNATIONALE DE NORMALISATION

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## **Information processing — Data interchange on 130 mm (5.25 in) flexible disk cartridges using two-frequency recording at 7 958 ftprad, 1,9 tpmm (48 tpi), on one side — Part 1 : Dimensional, physical and magnetic characteristics**

*Traitement de l'information — Échange de l'information sur cartouches à disquette de 130 mm (5,25 in) utilisant un enregistrement à deux fréquences à 7 958 ftprad, 1,9 tpmm (48 tpi), sur une face — Partie 1 : Caractéristiques dimensionnelles, physiques et magnétiques*

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**Descriptors :** data processing, information interchange, data recording devices, magnetic disks, flexible disks, specifications, dimensions, physical properties, magnetic properties.

## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 6596/1 was prepared by Technical Committee ISO/TC 97, *Information processing systems*.

ISO 6596/1 was first published in 1982. This second edition cancels and replaces the first edition, the following clauses of the previous edition have been technically revised: 6.1.9, 8.2.1.3, annex D, figure 4, figure 8 and figure 14.

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# Information processing — Data interchange on 130 mm (5.25 in) flexible disk cartridges using two-frequency recording at 7 958 ftprad, 1,9 tpmm (48 tpi), on one side — Part 1 : Dimensional, physical and magnetic characteristics

## 0 Introduction

ISO 6596 specifies the characteristics of 130 mm (5.25 in) flexible disk cartridges recorded at 7 958 ftprad on one side using two-frequency recording.

ISO 6596/2 specifies the quality of recorded signals, the track layout, and the track format to be used on a 130 mm (5.25 in) flexible disk cartridge, recorded at 7 958 ftprad, 1,9 tpmm (48 tpi), on one side, using two-frequency recording, which is intended for data interchange between data processing systems.

Together with the labelling scheme to be specified in ISO 7665, ISO 6596/1 and ISO 6596/2 provide for full data interchange between data processing systems.

## 1 Scope and field of application

This part of ISO 6596 specifies the dimensional, physical and magnetic characteristics of the cartridge, so as to provide physical interchangeability between data processing systems.

NOTE — Numeric values in the SI and/or Imperial measurement system in this International Standard may have been rounded and therefore are consistent with, but not exactly equal to, each other. Either system may be used, but the two should be neither intermixed nor reconverted. The original design was made using Imperial units and further developments were made using SI units.

## 2 References

ISO 646, *Information processing — ISO 7-bit coded character set for information interchange*.

ISO 2022, *Information processing — ISO 7-bit and 8-bit coded character sets — Code extension techniques*.

ISO 4873, *Information processing — 8-bit code for information interchange — Structure and rules for implementation*.

ISO 7665, *Information processing — File structure and labelling of flexible disc cartridges for information interchange*.

## 3 Definitions

For the purpose of this International Standard the following definitions apply.

**3.1 flexible disk** : A flexible disk which accepts and retains on the specified side or sides magnetic signals intended for input/output and storage purposes of information data processing and associated systems.

**3.2 reference flexible disk cartridge** : A flexible disk cartridge arbitrarily selected for a given property for calibrating purposes.

**3.3 secondary reference flexible disk cartridge** : A flexible disk cartridge intended for routine calibrating purposes, the performance of which is known and stated in relation to that of the reference flexible disk cartridge.

**3.4 signal amplitude reference flexible disk cartridge** : A reference flexible disk cartridge selected as a standard for recording field and signal amplitude.

NOTE — A master standard for signal amplitudes, reference fields, overwrite and resolution characteristics has been established by the Physikalisch-Technische Bundesanstalt (PTB), Bundesallee 100 in Braunschweig, Germany, F.R. Secondary reference flexible disk cartridges can be ordered from PTB Lab 5.11 under part number RM 6596 as long as available.

**3.5 typical field** : The minimum recording field which, when applied to a flexible disk cartridge, causes a signal output equal to 95 % of the maximum average signal amplitude when taken as a function of the recording field at the specified track and flux transition frequency of that flexible disk cartridge.

**3.6 reference field** : The typical field of the signal amplitude reference flexible disk cartridge.