

# INTERNATIONAL STANDARD

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## **Information technology — 90 mm flexible disk cartridges for information interchange — 21 MBytes formatted capacity — ISO Type 305**

*Technologies de l'information — Cartouches à disquette de 90 mm pour  
l'échange d'information — Capacité formatée de 21 MB — Type ISO 305*



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## Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

In the field of information technology, ISO and IEC have established a joint technical committee, ISO/IEC JTC1. Draft International Standards adopted by the joint technical committee are circulated to national bodies for voting. Publication as an International Standard requires approval by at least 75 % of the national bodies casting a vote.

International Standard ISO/IEC 14169 was prepared by the Japanese Industrial Standards Committee (as Standard JIS X 6228 - 1994) with document support and contribution from ECMA and was adopted, under a special "fast-track procedure" by Joint Technical Committee ISO/IEC JTC1, *Information technology*, in parallel with its approval by national bodies of ISO and IEC.

Annexes A to L form an integral part of this International Standard. Annexes M to T are for information only.

## Introduction

This International Standard specifies the characteristics of 90 mm flexible disk cartridges of 21 MBytes formatted capacity, recorded at 31 831 ftprad in the Inner Zone and 47 747 ftprad in the Outer Zone with sector servo tracking on 326 Data Tracks on each side, using 2-7 RLL recording.

This International Standard specifies the physical interchangeability of the unrecorded disk and the format interchangeability of recorded Data Tracks and Servo Tracks.

In reference to ISO/IEC 9983, flexible disk cartridges conforming to this International Standard are designated as ISO Type 305.



# Information technology - 90 mm flexible disk cartridges for information interchange - 21 MBytes formatted capacity - ISO Type 305

## Section 1 - General

### 1 Scope

This International Standard specifies the characteristics of 90 mm flexible disk cartridges (FDC) of 21 Mbytes formatted capacity, recorded at 31 831 ftprad in the Inner Zone and 47 747 ftprad in the Outer Zone with sector servo tracking on 326 data tracks on each side, using 2-7 RLL recording.

It specifies the mechanical, physical and magnetic characteristics of the cartridge, so as to provide physical interchangeability between data processing systems.

It also specifies the method of recording, the quality of recorded signals, the track layouts and the track formats of Data Tracks and Servo Tracks.

Such flexible disk cartridges are identified as ISO Type 305.

Together with a standard for volume and file structure, for instance ISO/IEC 9293, this International Standard provides for full data interchange between data processing systems.

### 2 Conformance

#### 2.1 Flexible disk cartridge

A 90 mm flexible disk cartridge shall be in conformance with this International Standard if it meets all the mandatory requirements specified herein.

#### 2.2 Generating systems

A system generating an FDC for interchange shall be entitled to claim conformance with this International Standard if all recordings on the flexible disk meet the mandatory requirements of this International Standard.

#### 2.3 Receiving systems

A system receiving an FDC for interchange shall be entitled to claim full conformance with this International Standard if it is able to handle any recording made on the flexible disk according to this International Standard.

### 3 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 683-13: 1986, *Heat-treatable steels, alloy steels and free-cutting steels - Part 13: Wrought stainless steels*.

ISO/IEC 9293:1994, *Information technology - Volume and file structure of disk cartridges for information interchange*.

ISO/IEC 9983:1995, *Information technology - Designation of unrecorded flexible disk cartridges*.

IEC 950:1991, *Safety of information technology equipment, including electrical business equipment*.

### 4 Definitions

For the purposes of this International Standard, the following definitions apply.

**4.1 Average Signal Amplitude:** The Average Signal Amplitude for a track is the arithmetically averaged value of the output voltages measured peak-to-peak over the whole track.

**4.2 case:** A protective enclosure including a shutter mechanism, identification holes and a write-inhibit hole.