
International Standard



5654 / 1

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

**Information processing — Data interchange on 200 mm (8 in) flexible disk cartridges using two-frequency recording at 13 262 ftprad, 1,9 tpmm (48 tpi), on one side —
Part 1 : Dimensional, physical and magnetic characteristics**

Traitement de l'information — Échange d'information sur cartouches à disquette de 200 mm (8 in) utilisant un enregistrement à deux fréquences à 13 262 ftprad, 1,9 tpmm (48 tpi), sur une face — Partie 1 : Caractéristiques dimensionnelles, physiques et magnétiques

Second edition — 1984-12-01

Corrected — 1985-12-15

UDC 681.327.63

Ref. No. ISO 5654/1-1982 (E)

Descriptors : data processing, information interchange, data storage devices, magnetic disk, characteristics, dimensions, physical properties, magnetic properties, definitions.

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.

International Standard ISO 5654/1 was developed by Technical Committee ISO/TC 97, *Computers and information processing*, and was circulated to the member bodies in June 1980.

It has been approved by the member bodies of the following countries :

Australia	Iraq	South Africa, Rep. of
Canada	Italy	Spain
Cuba	Japan	Sweden
Czechoslovakia	Mexico	Switzerland
Finland	Netherlands	United Kingdom
France	New Zealand	USSR
Germany, F. R.	Poland	
Iran	Romania	

The member bodies of the following countries expressed disapproval of the document on technical grounds :

Belgium
Ireland

Contents

	Page
0 Introduction	1
1 Scope and field of application	1
2 References	1
3 Definitions	1
4 General description	2
4.1 General figures	2
4.2 Main elements	2
4.3 Description	2
4.4 Optional features	2
5 General requirements	2
5.1 Environment and transportation	2
5.2 Materials	3
5.3 Direction of rotation	3
6 Dimensional characteristics	3
6.1 Jacket	3
6.2 Liner	4
6.3 Disk	4
7 Physical characteristics	5
7.1 Inflammability	5
7.2 Coefficient of linear thermal expansion of the disk	5
7.3 Coefficient of linear hygroscopic expansion of the disk	5
7.4 Opacity	5
7.5 Torque	5

8	Magnetic characteristics	5
8.1	Track geometry	5
8.2	Functional testing	6

Annexes

A	Measurement of light transmittance	11
B	Measurement of the cartridge thickness	14
C	Method for measuring the effective track width	16
D	Write-inhibit notch	17

Information processing — Data interchange on 200 mm (8 in) flexible disk cartridges using two-frequency recording at 13 262 ftprad, 1,9 tpmm (48 tpi), on one side —

Part 1 : Dimensional, physical and magnetic characteristics

0 Introduction

ISO 5654 specifies the characteristics of 200 mm (8 in) flexible disk cartridges recorded at 13 262 ftprad on one side using two-frequency recording.

ISO 5654/2 specifies the quality of recorded signals, track layout, and the track format.

Together with the labelling scheme specified in ISO 7665, ISO 5654/1 and ISO 5654/2 provide for full data interchange between data processing systems.

1 Scope and field of application

This part of ISO 5654 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 measurements 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 the Imperial measurement system.

2 References

ISO 646, *Information processing — 7-bit coded character set for information interchange.*¹⁾

ISO 2022, *Information processing — ISO 7-bit and 8-bit coded character sets — Code extension techniques.*²⁾

ISO 4873, *Information processing — 8-bit coded character set for information interchange.*

ISO 7665, *Information processing — File structure and labelling of flexible disk cartridges for information interchange.*³⁾

1) At present at the stage of draft. (Revision of ISO 646-1973.)

2) At present at the stage of draft. (Revision of ISO 2022-1973.)

3) At present at the stage of draft.