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# INTERNATIONAL STANDARD



# 3562

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

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## Information processing — Interchangeable magnetic single disk cartridge (top loaded) — Physical and magnetic characteristics

*Traitement de l'information — Chargeur interchangeable monodisque magnétique à chargement vertical —  
Caractéristiques mécaniques et magnétiques*

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It has been approved by the Member Bodies of the following countries :

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No Member Body expressed disapproval of the document.

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# Information processing — Interchangeable magnetic single disk cartridge (top loaded) — Physical and magnetic characteristics

## 1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the general, physical, and magnetic characteristics for the interchange of magnetic single disk cartridges (top loaded) in order to facilitate the interchange of data between electronic data processing systems.

It does not apply to a specific design. It defines only the parameters relevant for interchange.

## 2 GENERAL DESCRIPTION

### 2.1 General figures

A typical single disk cartridge is shown in figures 1 to 3.

### 2.2 Main elements

The main elements of this single disk cartridge are :

- the top cover
- the seal inserted in the rim of the top cover
- the recording disk
- the disk hub
- the armature plate
- the protective cover
- the removable cover

### 2.3 Other elements

Only the main elements are shown in the drawings. Usual disk cartridges may generally comprise also a handle, a mechanism for disconnecting the removable cover from the position of figure 2 so that it can be placed in the position of figure 3, and means for removing the disk cartridge from the drive. These other elements are not represented as they are not part of this International Standard.

### 2.4 Non-working and working positions

Figure 2 shows the cartridge in the unmounted condition, in which the removable cover is maintained in contact with the seal in the top cover so as to prevent ingress of dirt and contamination. A means must be provided to safely restrain the disk within the cartridge during operator handling, shipping, etc.

Figure 3 shows the cartridge in the mounted position, with the removable cover on top of the cartridge. In this position the rim of the removable cover lies on the upper surface of the rim of the top cover. Not represented is the mechanism of the disk drive which exerts a downward retaining force on the pressure area of the removable cover.

### 2.5 Direction of rotation

The recording disk shall rotate counter-clockwise when viewed from the top.

## 3 GENERAL REQUIREMENTS

### 3.1 Operating, storage and test environments

#### 3.1.1 Operating environment

The operating temperature measured within the cartridge shall lie within the range 15 to 50 °C (60 to 120 °F) at a relative humidity of 8 to 80 %. The wet bulb reading shall not exceed 26 °C (78 °F). Before a cartridge is placed into operation, it shall be conditioned within its covers for a minimum of 2 h in the same environment as that in which the disk drive is operating. The above specified range does not necessarily apply to the disk drive.

#### 3.1.2 Storage environment

##### 3.1.2.1 UNRECORDED DISKS

The storage temperature shall lie within the range - 40 °C to + 65 °C (- 40 °F to + 150 °F), the wet bulb reading not exceeding 30 °C (85 °F). For wet bulb temperatures between 0,5 °C (33 °F) and 30 °C (85 °F) the disk cartridge shall be able to withstand a relative humidity of 8 to 80 %.

##### 3.1.2.2 RECORDED DISKS

The storage temperature shall lie within the range - 40 °C to + 65 °C (- 40 °F to + 150 °F), the wet bulb reading not exceeding 30 °C (85 °F). For wet bulb temperatures between 0,5 °C (33 °F) and 30 °C (85 °F) the disk cartridge shall be able to withstand a relative humidity of 8 to 80 %.

The stray magnetic field intensity shall not exceed 4 000 A/m.