
INTERNATIONAL STANDARD



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Information processing — Interchangeable magnetic eleven-disk pack — Physical and magnetic characteristics

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FOREWORD

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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 3564 was drawn up by Technical Committee ISO/TC 97, *Computers and information processing*, and circulated to the Member Bodies in August 1974.

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

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Information processing — Interchangeable magnetic eleven-disk pack — Physical and magnetic characteristics

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies the general, physical, and magnetic characteristics for the physical interchange of magnetic eleven-disk packs for use in electronic data processing systems.

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

2 DEFINITIONS

The terms for elements of eleven-disk packs are defined by figures 1 and 2.

Figures 1 to 5 show a typical disk pack assembly for illustration purposes only.

3 GENERAL REQUIREMENTS

3.1 Operating, storage and test environment

3.1.1 Operating environment

The operating temperature 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 disk pack 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.

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

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 pack 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 pack shall be able to withstand a relative humidity of 8 to 80 %. The stray magnetic field intensity shall not exceed 4 000 A/m.

A suggested accelerated storage life test is included in annex A.

3.1.3 Test environment

Unless otherwise stated, measurements shall be carried out at 23 ± 3 °C (73 ± 5 °F), 40 to 60 % relative humidity after 24 h of acclimatization. Tests shall be carried out with the disk pack in the upright position, unless otherwise stated.

3.2 Resistance to shock and vibration

The disk pack shall withstand exposure to shock and/or vibration and still meet all dimensional and functional specifications of this International Standard.

A recommended test procedure is described in annex B. Any damage to the cover shall not be a failure criterion.

3.3 Materials

Unless otherwise stated, the disk pack may be constructed from any suitable materials so long as the dimensional, inertial and other functional requirements of this International Standard are maintained. The material and surface finish of the index disk are given in 4.1.5.5.

The materials and design of the disk pack shall be based on an intended lifetime of minimum 5 years.