

This is a preview of "BS EN 60068-2-6:2008". [Click here to purchase the full version from the ANSI store.](#)

# Environmental testing —

## Part 2-6: Tests — Test Fc: Vibration (sinusoidal)

ICS 19.040

This is a preview of "BS EN 60068-2-6:2008". [Click here to purchase the full version from the ANSI store.](#)

This British Standard is the UK implementation of EN 60068-2-6:2008. It is identical to IEC 60068-2-6:2007. It supersedes BS EN 60068-2-6:1996 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee GEL/104, Environmental conditions, classification and testing.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 31 March 2008

© BSI 2008

ISBN 978 0 580 56402 4

**Amendments/corrigenda issued since publication**

Date	Comments

English version

**Environmental testing -  
Part 2-6: Tests -  
Test Fc: Vibration (sinusoidal)  
(IEC 60068-2-6:2007)**

Essais d'environnement -  
Partie 2-6: Essais -  
Essai Fc: Vibrations (sinusoïdales)  
(CEI 60068-2-6:2007)

Umgebungseinflüsse -  
Teil 2-6: Prüfverfahren -  
Prüfung Fc: Schwingen (sinusförmig)  
(IEC 60068-2-6:2007)

This European Standard was approved by CENELEC on 2008-02-01. CENELEC members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CENELEC member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CENELEC member into its own language and notified to the Central Secretariat has the same status as the official versions.

CENELEC members are the national electrotechnical committees of Austria, Belgium, Bulgaria, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

**CENELEC**

European Committee for Electrotechnical Standardization  
Comité Européen de Normalisation Electrotechnique  
Europäisches Komitee für Elektrotechnische Normung

**Central Secretariat: rue de Stassart 35, B - 1050 Brussels**

This is a preview of "BS EN 60068-2-6:2008". [Click here to purchase the full version from the ANSI store.](#)

## Foreword

The text of document 104/439/FDIS, future edition 7 of IEC 60068-2-6, prepared by IEC TC 104, Environmental conditions, classification and methods of test, was submitted to the IEC-CENELEC parallel vote and was approved by CENELEC as EN 60068-2-6 on 2008-02-01.

This European Standard supersedes EN 60068-2-6:1995.

The major changes with regard to EN 60068-2-6:1995 concern:

- the agreed wording from IEC technical committee 104 meeting held in Stockholm:2000 on the testing of soft packages;
- reference to the latest version of EN 60068-2-47: Mounting;
- simplification of the layout of the standard by replacing some tables with text;
- addition of the test report requirements (see Clause 13).

The following dates were fixed:

- latest date by which the EN has to be implemented at national level by publication of an identical national standard or by endorsement (dop) 2008-11-01
- latest date by which the national standards conflicting with the EN have to be withdrawn (dow) 2011-02-01

Annex ZA has been added by CENELEC.

---

## Endorsement notice

The text of the International Standard IEC 60068-2-6:2007 was approved by CENELEC as a European Standard without any modification.

---

This is a preview of "BS EN 60068-2-6:2008". [Click here to purchase the full version from the ANSI store.](#)

## CONTENTS

INTRODUCTION .....	5
1 Scope .....	6
2 Normative references .....	6
3 Terms and definitions .....	6
4 Requirements for testing .....	9
4.1 Required characteristics .....	9
4.1.1 Basic motion .....	9
4.1.2 Spurious motion .....	9
4.1.3 Signal tolerance .....	10
4.1.4 Vibration amplitude tolerances .....	10
4.1.5 Frequency tolerances .....	10
4.1.6 Sweep .....	11
4.2 Control strategy .....	11
4.2.1 Single/multipoint control .....	11
4.2.2 Multi-reference control .....	12
4.3 Mounting .....	12
5 Severities .....	12
5.1 Frequency range .....	13
5.1.1 Lower frequency $f_1$ Hz .....	13
5.1.2 Upper frequency $f_2$ Hz .....	13
5.2 Vibration amplitude .....	13
5.3 Duration of endurance .....	16
5.3.1 Endurance by sweeping .....	16
5.3.2 Endurance at fixed frequencies .....	17
6 Preconditioning .....	17
7 Initial measurements .....	17
8 Testing .....	17
8.1 General .....	17
8.2 Vibration response investigation .....	18
8.3 Endurance procedures .....	18
8.3.1 Endurance by sweeping .....	18
8.3.2 Endurance at fixed frequencies .....	18
9 Intermediate measurements .....	19
10 Recovery .....	19
11 Final measurements .....	19
12 Information to be given in the relevant specification .....	19
13 Information to be given in the test report .....	20
Annex A (informative) Guide to test $F_c$ .....	22
Annex B (informative) Examples of severities primarily intended for components .....	35
Annex C (informative) Examples of severities primarily intended for equipment .....	36
Annex ZA (normative) Normative references to international publications with their corresponding European publications .....	39
Bibliography .....	38