INTERNATIONAL STANDARD

ISO 8009

First edition 2004-10-01

Mechanical contraceptives — Reusable natural and silicone rubber contraceptive diaphragms — Requirements and tests

Contraceptifs mécaniques — Diaphragmes contraceptifs réutilisables en caoutchouc — Performances et essais



Reference number ISO 8009:2004(E)

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

The series of th

© ISO 2004

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Case postale 56 • CH-1211 Geneva 20 Tel. + 41 22 749 01 11 Fax + 41 22 749 09 47 E-mail copyright@iso.org Web www.iso.org Published in Switzerland

Contents

Page

Forewo	ord	. iv
Introdu	iction	v
1	Scope.	1
2	Normative references	1
3	Terms and definitions	1
4	Sampling	2
5	Classification	2
6	Materials	2
7	Design	2
7.1	General	2
7.2	Rim.	2
7.3 7.4	Spring ands	Z
7.5	Dome and rim	2
8		2
8.1	Diameter	3
8.2	Dome thickness.	3
9	Tensile properties of the dome	3
9.1	Tensile strength	3
9.2	Elongation at break	3
10	Type 1 and Type 2 diaphragms — Mechanical properties of rim and spring	4
10.1	Compression resistance	4
10.2	Twisting during compression	4
11	Freedom from visible defects	4
12	Test report	5
	Paskasian labelling and stands	
13	Packaging, labelling and storage	5 5
13.2	Labelling	5
13.3	Storage	6
Annex	A (normative) Determination of size	7
Annex	B (normative) Determination of dome thickness	8
Annex	C (normative) Determination of tensile properties	9
Annex	D (normative) Determination of deterioration after accelerated ageing by oven treatment	11
Annex	E (normative) Determination of compression and fatigue resistances of coil-spring and	
	flat-spring diaphragms	13
Annex	F (normative) Determination of twisting during compression of coil-spring and flat spring	
	diaphragms	16
Annex	G (normative) Determination of visible defects	19
Annex	H (normative) Test report	23
Annex	I (normative) Instructions for care and use of reusable rubber contraceptive diaphragms	24
Bibliog	raphy	26

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in Maison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 8009 was prepared by Technical Committee ISO/TC 157, Mechanical contraceptives.

This first edition cancels and replaces 0.80 8009-1:1997, ISO 8009-2:1985, ISO 8009-3:1985, ISO 8009-4:1996, ISO 8009-5:1996, ISO 8009-6:1985, ISO 8009-7:1985, ISO 8009-8:1985, ISO 8009-9:1985 and ISO 8009-10:1985, which have been technically replaced and incorporated into one document.



Introduction

Diaphragms are medical devices. Therefore, they should be produced under a good quality management system. Reference should be made, for example to the ISO 9000 series, in conjunction with ISO 13485 or ISO 13488 as appropriate.

The sampling plans and acceptance quality limits (AQLs) given in this International Standard are for referee testing. The AQLs represent the maximum tolerable level of defects in the products. As diaphragms are intended for re-use, manufacturers should strive for entirely defect-free product.

Bedlig. The Key process and apply additional and alternative quality control measures for their use and after production. These method, they differ among manufacturers.

this document is a preview denerated by EUS

Mechanical contraceptives — Reusable natural and silicone rubber contraceptive diaphragms — Requirements and tests

1 Scope

This International Standard specifies the minimum requirements and test methods to be used for reusable diaphragms made from ratural rubber and silicone rubber. These diaphragms are intended for contraceptive use.

This International Standard spot applicable to other vaginal contraceptive barriers, such as those known as cervical caps, vaginal sponges and vaginal sheaths.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies

ISO 188, Rubber, vulcanized or thermoplastic – Orgcelerated ageing and heat resistance tests

ISO 463, Geometrical Product Specifications (GP Dimensional measuring equipment — Design and metrological characteristics of mechanical dial gauges

ISO 2859-1:1999, Sampling procedures for inspection by Atributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection

ISO 10993-5, Biological evaluation of medical devices — Part 5 Dests for in vitro cytotoxicity

ISO 10993-10, Biological evaluation of medical devices — Part P. Tests for irritation and delayed-type hypersensitivity

3 Terms and definitions

For the purpose of this document, the terms and definition given in ISO 2859-1 and the following apply.

3.1

lot

batch

collection of diaphragms of the same design, colour, shape, size and formulation, manufactured at essentially the same time, using the same process, common lots of raw materials, common equipment and personnel

NOTE The size of a lot is not specified in this International Standard, but it may be possible for a purchaser to do so as part of a purchasing contract. Depending on the method of manufacture, multiple sizes can be produced in a defined lot/batch. In such cases, traceability can be maintained by using both the lot number and the size.