

This is a preview of "ISO 11608-2:2012". [Click here to purchase the full version from the ANSI store.](#)

Second edition  
2012-04-01

---

---

## Needle-based injection systems for medical use — Requirements and test methods —

### Part 2: Needles

*Systèmes d'injection à aiguille pour usage médical — Exigences et méthodes d'essai —*

*Partie 2: Aiguilles*



Reference number  
ISO 11608-2:2012(E)

© ISO 2012

This is a preview of "ISO 11608-2:2012". [Click here to purchase the full version from the ANSI store.](#)



**COPYRIGHT PROTECTED DOCUMENT**

© ISO 2012

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](mailto:copyright@iso.org)  
Web [www.iso.org](http://www.iso.org)

Published in Switzerland

This is a preview of "ISO 11608-2:2012". Click here to purchase the full version from the ANSI store.

## Contents

Page

Foreword .....	iv
Introduction .....	v
1 Scope .....	1
2 Normative references .....	1
3 Terms and definitions .....	1
4 Requirements .....	3
4.1 Materials .....	3
4.2 Dimensions .....	3
4.3 Determination of flow rate through the needle .....	3
4.4 Bond between hub and needle tube .....	3
4.5 Needle points .....	4
4.6 Freedom from defects .....	4
4.7 Lubrication .....	4
4.8 Dislocation of measuring point at patient end .....	4
4.9 Determination of functional compatibility with needle-based injection systems .....	4
4.10 Ease of assembly and disassembly .....	4
4.11 Sterility .....	4
5 Sampling .....	4
6 Pre-conditioning of needles .....	5
6.1 Pre-conditioning in a dry-heat atmosphere .....	5
6.2 Pre-conditioning in a cold-storage atmosphere .....	5
6.3 Pre-conditioning in a cyclical atmosphere .....	5
7 Standard atmosphere and apparatus for tests .....	6
7.1 General .....	6
7.2 Standard test atmosphere .....	6
7.3 Test gauge .....	6
8 Determination of dislocation of measuring point at patient end .....	7
9 Bond between hub and needle tube .....	8
10 Packaging .....	8
11 Test method for validating the compatibility of needles and injector systems .....	8
11.1 Principle .....	8
11.2 Apparatus and equipment .....	9
11.3 Sample quantity requirements .....	9
11.4 Procedure .....	9
11.5 Acceptance criteria .....	11
11.6 Test report .....	12
12 Information supplied by the manufacturer .....	12
12.1 General .....	12
12.2 Marking .....	12
12.3 Instructions for use .....	14
Annex A (normative) Determination of flow rate through needle .....	15
Bibliography .....	17

This is a preview of "ISO 11608-2:2012". [Click here to purchase the full version from the ANSI store.](#)

## 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 liaison 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 11608-2 was prepared by Technical Committee ISO/TC 84, *Devices for administration of medicinal products and intravascular catheters*.

This second edition cancels and replaces the first edition (ISO 11608-2:2000), which has been technically revised.

ISO 11608 consists of the following parts, under the general title *Needle-based injection systems for medical use — Requirements and test methods*:

- *Part 1: Needle-based injection systems*
- *Part 2: Needles*
- *Part 3: Finished containers*
- *Part 4: Requirements and test methods for electronic and electromechanical pen-injectors*
- *Part 5: Automated functions*

This is a preview of "ISO 11608-2:2012". [Click here to purchase the full version from the ANSI store.](#)

## Introduction

This part of ISO 11608 covers sterile double-ended needles intended for single use in conjunction with needle-based injection systems (e.g. pen injectors). These needles are often referred to as pen needles.

The devices described in this part of ISO 11608 are designed to be used with the devices described in ISO 11608-1 and ISO 11608-3.

The first edition of this part of ISO 11608 introduced the concept of interchangeability and the labelling designations "Type A" (i.e. interchangeable) and "non-Type A" for needles and container closure systems. Since its promulgation, experience has shown that the complexity of these systems makes it very difficult to ensure functional compatibility as defined in the different parts of this International Standard, particularly when products are made by different manufacturers and the design is not verified as a system. Based on this experience, it is believed that the Type A designation does not represent adequate guidance to the user in making decisions on the compatibility of needles and container closures with specific needle-based injection systems (NIS). As such, the labelling designation "Type A" has been removed.

This second edition of ISO 11608-2 addresses functional compatibility of the system through testing in accordance with Clause 11. Flow rate is introduced as a new parameter. The sampling plans for inspection selected for this part of ISO 11608 are intended to verify, at a high confidence level, the manufacturer's ability to manufacture one "lot" of needles that conforms to the critical product attributes. The sampling plans for inspection do not replace the more general manufacturing quality systems that appear in standards on quality systems, for example ISO 9000.

This part of ISO 11608 does not specify requirements or test methods for freedom from biological hazards because no international agreement on the methodology and the pass/fail criteria has been reached. Guidance on biological tests relevant to double-ended needles is given in ISO 10993-1, and it is suggested that manufacturers take this guidance into account when evaluating products. Such evaluation should include the effects of the sterilization process. However, national regulations might exist in some countries, which might take precedence over the guidance in ISO 10993-1.

In some countries, national regulations exist and their requirements might supersede or complement this part of ISO 11608.