# INTERNATIONAL STANDARD

ISO 28620

First edition 2010-02-15

## Medical devices — Non-electrically driven portable infusion devices

Dispositifs médicaux — Diffuseurs portables de médicaments, non mus électriquement



#### 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.





### COPYRIGHT PROTECTED DOCUMENT

#### © ISO 2010

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

Page

## Contents

Fore	word	IV
1	Scope	1
2	Normative references	1
3	Terms and definitions	2
4	General requirements	3
4.1	Components A.	3
4.2	Materials	
4.3	Design and characteristics	
4.4	Sterility and non-pyrogenicity	4
5	Operating requirements	
5.1	Accuracy of the device	4
6	Test methods	5
6.1	General test conditions	5
6.2	Determination of the flow rates.	6
6.3	Resistance to pressure	7
6.4	Drop test method	7
6.5	Water-tightness of the components of the device	7
6.6	Resistance to traction of the entire device	8
6.7	Bolus volume	8
6.8	Bolus volume	8
7		_
8	Accompanying documents	9
Riblia	ography	11
	Accompanying documents	

## **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 28620 was prepared by Technical Committee ISO/TC 76, Transfusion, infusion and injection equipment for medical and pharmaceutical use.

## Medical devices — Non-electrically driven portable infusion devices

## 1 Scope

This International Standard specifies essential requirements and related test methods for non-electrically driven portable infusion devices<sup>1)</sup>. It applies to devices designed for continuous (fixed or adjustable) flow and/or for bolus application

These devices can be used the ealth care and non-health care settings. They can be applied or administered by health care professionals or by the intended patient.

These devices can be pre-filled by the manufacturer or filled before use by a health care professional or the intended patient.

This International Standard does not apply to

- electrically driven or electrically controlled infusion pumps that are covered by IEC 60601-2-24;
- implantable devices;
- enteral feeding pumps;
- transdermal delivery devices;
- devices where the energy for infusion is not provided the device or through active intervention by the patient (e.g. devices only powered by gravity).

### 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 594-1, Conical fittings with a 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 1: General requirements

ISO 594-2, Conical fittings with 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 2: Lock fittings

ISO 10993 (all parts), Biological evaluation of medical devices

ISO 15223-1, Medical devices — Symbols to be used with medical device labels, labelling and information to be supplied — Part 1: General requirements

© ISO 2010 – All rights reserved

<sup>1)</sup> Thereafter called "device".