# BS EN ISO 10555-4:2013



**BSI Standards Publication** 

# Intravascular catheters — Sterile and single-use catheters

Part 4: Balloon dilatation catheters (ISO 10555-4:2013)



...making excellence a habit."

This British Standard is the UK implementation of EN ISO 10555-4:2013. It supersedes BS EN ISO 10555-4:1997 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee CH/84, Catheters and syringes.

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.

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

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Date Text affected

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# EUROPÄISCHE NORM

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Supersedes EN ISO 10555-4:1997

**English Version** 

# Intravascular catheters - Sterile and single-use catheters - Part 4: Balloon dilatation catheters (ISO 10555-4:2013)

Cathéters intravasculaires - Cathéters stériles et non réutilisables - Partie 4: Cathéters de dilatation à ballonnets (ISO 10555-4:2013) Intravaskuläre Katheter - Sterile Katheter zur einmaligen Verwendung - Teil 4: Ballondilatationskatheter (ISO 10555-4:2013)

This European Standard was approved by CEN on 29 May 2013.

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CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

# Foreword

This document (EN ISO 10555-4:2013) has been prepared by Technical Committee ISO/TC 84 "Devices for administration of medicinal products and intravascular catheters" in collaboration with Technical Committee CEN/TC 205 "Non-active medical devices" the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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

This document supersedes EN ISO 10555-4:1997.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

#### **Endorsement notice**

The text of ISO 10555-4:2013 has been approved by CEN as EN ISO 10555-4:2013 without any modification.

# Annex ZA (informative)

# Relationship between this European Standard and the Essential Requirements of EU Directive 93/42/EEC amended by Directive 2007/47/EEC

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association to provide a means of conforming to Essential Requirements of Directive 93/42/EEC amended by Directive 2007/47/EEC.

Once this standard is cited in the Official Journal of the European Union under that Directive and has been implemented as a national standard in at least one Member State, compliance with the normative clauses of this standard given in Table ZA.1 confers, within the limits of the scope of this standard, a presumption of conformity with the relevant Essential Requirements of that Directive.

NOTE When an Essential Requirement does not appear in Table ZA.1, it means that it is not addressed by this European Standard.

Essential Requirements (ERs) of Directive 93/42/EEC	Clause(s)/sub-clause(s) of this EN ISO 10555-4
7.3	4.1
	4.4
7.5	4.1
8.1	4.1
8.3	4.1
8.4	4.1
9.1	4.1
9.2	4.1
	4.2
	4.3
	4.4
12.7.1	4.1
	4.4
12.7.4	4.1
12.8.1	4.1
13.1	4.1
	4.5 a)
13.2	4.1
13.3 a)	4.1
13.3 b)	4.1

# Table ZA.1— Correspondence between this European Standard and Directive 93/42/EEC amended by Directive 2007/47/EEC

13.3 c)	4.1
13.3 d)	4.1
13.3 e)	4.1
13.3 f)	4.1
13.3 i)	4.1
13.3 j)	4.1
	4.5 b), c), d) and e)
13.3 k)	4.1
13.3 m)	4.1
13.4	4.1
13.6 a)	4.1
13.6 b)	4.1
	4.5 a), b) and c)
13.6 c)	4.1
13.6 e)	4.1
13.6 f)	4.1
13.6 g)	4.1
13.6 k)	4.1
13.6 l)	4.1
13.6 n)	4.1
13.6 q)	4.1

WARNING — Other requirements and other EU Directives may be applicable to the product(s) falling within the scope of this standard.

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# 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 10555-4 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 10555-4:1996), which has been technically revised. It also incorporates the Technical Corrigendum ISO 10555-4:1996/Cor 1:2002.

ISO 10555 consists of the following parts, under the general title *Intravascular catheters* — *Sterile and single-use catheters*:

- Part 1: General requirements
- Part 3: Central venous catheters
- Part 4: Balloon dilatation catheters
- Part 5: Over-needle peripheral catheters

The following part is under preparation:

— Part 6: Subcutaneous implanted ports

The following part has been withdrawn and the content has been included in ISO 10555-1:

— Part 2: Angiographic catheters

Attention is drawn to ISO 11070, which specifies requirements for accessory devices for use with intravascular catheters, to ISO 25539-2 which specifies requirements for delivery systems if they comprise an integral component of the deployment of the vascular stent, and to ISO 14630.

# Intravascular catheters — Sterile and single-use catheters —

# Part 4: **Balloon dilatation catheters**

## 1 Scope

This part of ISO 10555 specifies requirements for balloon dilatation catheters supplied in the sterile condition, and intended for single use.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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<sup>1)</sup>

ISO 594-2, Conical fittings with a 6 % (Luer) taper for syringes, needles and certain other medical equipment — Part 2: Lock fittings<sup>1</sup>)

ISO 10555-1, Intravascular catheters — Sterile and single-use catheters — Part 1: General requirements

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 10555-1 and the following apply.

## 3.1

## balloon dilatation catheter

intravascular catheter fitted with a balloon near the distal end, which is introduced into an artery or vein to dilate a part or parts of the vascular system

# **4** Requirements

## 4.1 General

Unless otherwise specified in this part of ISO 10555, balloon dilatation catheters shall comply with ISO 10555-1.

# 4.2 Radio-detectability

The position of the balloon shall be radio detectable when the catheter has been inserted into the body.

# 4.3 Designation of nominal size

The nominal size of the catheter shall be designated by the following:

a) diameter(s) expressed in millimetres of the inflated balloon(s) or, for multidiameter balloon(s), the diameter of each portion at recommended pressure;

<sup>1)</sup> Upon its publication, ISO 80369-7 will replace ISO 594-1 and ISO 594-2.