

SLOVENSKI STANDARD **SIST EN ISO 3611:2011**

01-oktober-2011

Specifikacija geometrijskih veličin izdelka - Instrumenti za merjenje dimenzij -Mikrometri za zunanje meritve: konstrukcijske in meroslovne značilnostii (ISO 3611:2010)

Geometrical product specifications (GPS) - Dimensional measuring equipment: Micrometers for external measurements - Design and metrological characteristics (ISO 3611:2010)

Geometrische Produktspezifikation (GPS) - Längenmessgeräte: Bügelmessschrauben -Konstruktionsmerkmale und messtechnische Merkmale (ISO 3611:2010)

Spécification géométrique des produits (GPS) - Equipement de mesurage dimensionnel: Micromètres d'extérieur - Caractéristiques de conception et caractéristiques métrologiques (ISO 3611:2010)

Ta slovenski standard je istoveten z: EN ISO 3611:2010

ICS:

17.040.30 Merila Measuring instruments

SIST EN ISO 3611:2011 de

iTeh STANDARD PREVIEW (standards.iteh.ai)

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM **EN ISO 3611**

November 2010

ICS 17.040.30

English Version

Geometrical product specifications (GPS) - Dimensional measuring equipment: Micrometers for external measurements - Design and metrological characteristics (ISO 3611:2010)

Spécification géométrique des produits (GPS) -Équipement de mesurage dimensionnel: Micromètres d'extérieur - Caractéristiques de conception et caractéristiques métrologiques (ISO 3611:2010) Geometrische Produktspezifikation (GPS) -Längenmessgeräte: Bügelmessschrauben -Konstruktionsmerkmale und messtechnische Merkmale (ISO 3611:2010)

This European Standard was approved by CEN on 11 September 2010.

CEN 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 CEN-CENELEC Management Centre or to any CEN 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 CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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



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

Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 3611:2010 (E)

Contents	Pag
Foreword	

iTeh STANDARD PREVIEW (standards.iteh.ai)

EN ISO 3611:2010 (E)

Foreword

This document (EN ISO 3611:2010) has been prepared by Technical Committee ISO/TC 213 "Dimensional and geometrical product specifications and verification" in collaboration with Technical Committee CEN/TC 290 "Dimensional and geometrical product specification and verification" the secretariat of which is held by AFNOR.

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 May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.

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.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

iTeh STANDARD PREVIEW
Endorsement notice

The text of ISO 3611:2010 has been approved by CEN as a EN ISO 3611:2010 without any modification.

iTeh STANDARD PREVIEW (standards.iteh.ai)

INTERNATIONAL STANDARD

ISO 3611

Second edition 2010-11-01

Geometrical product specifications (GPS) — Dimensional measuring equipment: Micrometers for external measurements — Design and metrological characteristics

iTeh ST Spécification géométrique des produits (GPS) — Équipement de mesurage dimensionnel: Micromètres d'extérieur — Caractéristiques de conception et caractéristiques métrologiques (Standards.iten.al)

<u>SIST EN ISO 3611:2011</u> https://standards.iteh.ai/catalog/standards/sist/b8af739f-4d73-42b8-b09e-25faa43f14c7/sist-en-iso-3611-2011



Reference number ISO 3611:2010(E)

ISO 3611:2010(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.

iTeh STANDARD PREVIEW (standards.iteh.ai)

<u>SIST EN ISO 3611:2011</u> https://standards.iteh.ai/catalog/standards/sist/b8af739f-4d73-42b8-b09e-25faa43f14c7/sist-en-iso-3611-2011



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

Contents

Page

Forewo	ord	iν
Introdu	uction	. v
1	Scope	.1
2	Normative references	.1
3	Terms and definitions	.1
4 4.1 4.2 4.3 4.3.1 4.3.2 4.3.3 4.3.4 4.4 4.5 4.6 4.7 4.8 4.9	Design characteristics General design and nomenclature Main dimensions Types of indicating devices General Analogue indicating devices Digital indicating devices, with mechanical digital display Digital indicating devices with electronic digital display Protection for field use Frame Measuring faces France Company and angle in the pair Measuring force limiting device Adjustment devices (Stann dangle in the pair Design characteristics (manufacturer's specification)	.2 .3 .3 .4 .5 .6 .7 .7
5 5.1 5.2 5.3 5.3.1 5.3.2 5.3.3 5.3.4 5.4 5.5		.8 .8 .8 .8 .8
6	Proof of conformance with specifications	.9
7	Marking	
Annex	A (informative) Example of an error-of-indication curve	10
Annex	B (informative) Example of data sheet for micrometers for external measurements	11
Annex	C (informative) Calibration of metrological characteristics	12
Annex	D (informative) Error tests	13
Annex	E (informative) Notes on use	15
Annex	F (informative) Relation to the GPS matrix model	16
Bibliog	yraphy	18

ISO 3611:2010(E)

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 3611 was prepared by Technical Committee ISO/TC 213, Dimensional and geometrical product specifications and verification.

This second edition cancels and replaces the first edition (ISO 3611:1978), which has been technically revised. (standards.iteh.ai)

ISO 3611:2010(E)

Introduction

This International Standard is a geometrical product specification (GPS) standard and is to be regarded as a general GPS standard (see ISO/TR 14638). It influences the chain link 5 of the chain of standards on size in the general GPS matrix.

For more detailed information on the relation between this International Standard, other standards and the GPS matrix model, see Annex F.

iTeh STANDARD PREVIEW (standards.iteh.ai)

iTeh STANDARD PREVIEW (standards.iteh.ai)