Geometrical product specifications (GPS) - Dimensional measuring equipment: Dial test indicators (lever type) - Design and metrological characteristics

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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 9493:2010 sisaldab Euroopa standardi EN ISO 9493:2010 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 9493:2010 consists of the English text of the European standard EN ISO 9493:2010.
Standard on kinnitatud Eesti Standardikeskuse 30.11.2010 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 30.11.2010 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.11.2010.	Date of Availability of the European standard text 01.11.2010.
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Geometrical product specifications (GPS) - Dimensional measuring equipment: Dial test indicators (lever type) - Design and metrological characteristics (ISO 9493:2010)

Spécification géométrique des produits (GPS) - Équipement de mesurage dimensionnel: Comparateurs à levier mécaniques - Caractéristiques de conception et caractéristiques métrologiques (ISO 9493:2010)

Geometrische Produktspezifikation (GPS) - Längenmessgeräte: Fühlhebelmessgeräte - Konstruktionsmerkmale und messtechnische Merkmale (ISO 9493:2010)

This European Standard was approved by CEN on 2 October 2010.

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

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Foreword

This document (EN ISO 9493:2010) 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of an identical text or by endorsement, at the latest by May 2011, and conflicting national standards shall be withdrawn at the latest by May 2011.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.

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Endorsement notice

The text of ISO 9493:2010 has been approved by CEN as a EN ISO 9493:2010 without any modification.

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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 chains of standards on size, distance, form of a line independent of datum, form of a line dependent of datum, form of a surface independent of datum, form of a surface independent of datum, orientation, location, circular run-out and total run-out in the general GPS matrix.

When using this International Standard, see ISO 14978.

For more detailed information on the relation of this International Standard to other standards and the GPS matrix, see Annex E.

Geometrical product specifications (GPS) — Dimensional measuring equipment: Dial test indicators (lever type) — Design and metrological characteristics

1 Scope

This International Standard specifies the most important design and metrological characteristics of dial test indicators (lever type).

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 14253-1:1998, *Geometrical Product Specifications (GPS) – Inspection by measurement of workpieces and measuring equipment — Part 1: Decision rules for proving conformance or non-conformance with specifications*

ISO 14253-2:—[1)], *Geometrical product specifications (GPS) – Inspection by measurement of workpieces and measuring equipment — Part 2: Guidance for the estimation of uncertainty in GPS measurement, in calibration of measuring equipment and in product verification*

ISO 14978:2006, *Geometrical product specifications (GPS) — General concepts and requirements for GPS measuring equipment*

ISO/IEC Guide 98-3, *Uncertainty of measurement — Part 3: Guide to the expression of uncertainty in measurement (GUM:1995)*

ISO/IEC Guide 99, *International vocabulary of metrology — Basic and general concepts and associated terms (VIM)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO/IEC Guide 99, ISO 14253-1, ISO 14253-2, ISO 14978 and the following apply.

3.1
dial test indicator
⟨lever type⟩ measuring instrument in which the displacement of a pivoting stylus is transmitted and magnified by suitable mechanical means to a pointer which rotates in front of a circular scale

1) To be published. (Revision of ISO/TS 14253-2:1999)