

**Põllumajandusmasinad. Jõuülekanne liikuvate osade  
kaitse. Tööriista abil avatavad kaitse**

Agricultural machinery - Guards for moving parts of power  
transmission - Guard opening with tool

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 15811:2009 sisaldab Euroopa standardi EN 15811:2009 ingliskeelset teksti.

Standard on kinnitatud Eesti Standardikeskuse 30.10.2009 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 09.09.2009.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN 15811:2009 consists of the English text of the European standard EN 15811:2009.

This standard is ratified with the order of Estonian Centre for Standardisation dated 30.10.2009 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

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The standard is available from Estonian standardisation organisation.

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English Version

**Agricultural machinery - Guards for moving parts of power transmission - Guard opening with tool (ISO/TS 28923:2007 modified)**

Matériel agricole - Protecteurs pour éléments mobiles de transmission de puissance - Protecteur à ouverture avec outil (ISO/TS 28923:2007 modifiée)

Landmaschinen - Schutzeinrichtungen für bewegte Teile der Kraftübertragung - Mit Werkzeug zu öffnende Schutzeinrichtung (ISO/TS 28923:2007, modifiziert)

This European Standard was approved by CEN on 10 August 2009.

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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 Management Centre has the same status as the official versions.

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## Foreword

This document (EN 15811:2009) has been prepared by Technical Committee CEN/TC 144 "Tractors and machinery for agriculture and forestry", 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 March 2010, and conflicting national standards shall be withdrawn at the latest by March 2010.

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 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 Directives 98/37/EC and 2006/42/EC.

For relationship with EU Directives, see informative Annexes ZA and ZB, which are integral parts of this document.

This European Standard specifies safety requirements related to fixed guards of moving parts of mechanical power transmission and is to be used with EN ISO 4254-1:2009. The term "guard" is to be understood as "fixed guard", whenever used. This is also applicable to "access doors" designed as a guard.

The following editorial changes were introduced compared to ISO/TS 28923:2007:

- Updating of references, i.e.:
  - ISO 4254-1 is replaced with EN ISO 4254-1:2009;
  - ISO 13852:1996 is replaced with EN ISO 13857:2008.
- Correction of an error in 4.7:
  - The reference to ISO 12100-2:2003, 4.2.2.3 is replaced with ISO 12100-2:2003, 5.3.2.3;
- Addition of Annexes ZA and ZB.

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, 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.

## Introduction

The structure of safety standards in the field of machinery is as follows.

- a) Type-A standards (basis standards) give basic concepts, principles for design, and general aspects that can be applied to machinery.
- b) Type-B standards (generic safety standards) deal with one or more safety aspect(s) or one or more type(s) of safeguards that can be used across a wide range of machinery:
  - type-B1 standards on particular safety aspects (e.g. safety distances, surface temperature, noise);
  - type-B2 standards on safeguards (e.g. two-hands controls, interlocking devices, pressure sensitive devices, guards);
- c) Type-C standards (machinery safety standards) deal with detailed safety requirements for a particular machine or group of machines.

This European Standard is a type-C standard as stated in EN ISO 12100-1.

When provisions of this type-C standard are different from those which are stated in type-A or type-B standards, the provisions of this type-C standard take precedence over the provisions of the other standards for machines that have been designed and built according to the provisions of this type-C standard.

## 1 Scope

This European Standard gives safety requirements, and the means of verifying them, for the design and construction of guards, only able to be opened with a tool, which are used to guard the moving parts of the power transmission of self-propelled ride-on machines and mounted, semi-mounted or trailed machines used in agriculture. In addition, it specifies the type of information on safe working practices (including residual risks) to be provided by the manufacturer.

It deals with the significant hazards (as listed in Annex A), hazardous situations and events relevant to guards of moving parts of power transmission used as intended and under the conditions foreseen by the manufacturer (see Clauses 4 and 5).

It is not applicable to guards for moving parts of the power transmission of:

- tractors,
- aircraft,
- air cushion vehicles, or
- lawn and garden equipment.

## 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.

EN ISO 4254-1:2009, *Agricultural machinery - Safety - Part 1: General requirements (ISO 4254-1:2008)*

EN ISO 12100-2:2003, *Safety of machinery - Basic concepts, general principles for design - Part 2: Technical principles (ISO 12100-2:2003)*

EN ISO 13857:2008, *Safety of machinery - Safety distances to prevent hazard zones being reached by upper and lower limbs (ISO 13857:2008)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 4254-1:2009 apply.

## 4 Moving parts for power transmission

**4.1** Power transmission moving parts which generate hazards shall be guarded by location, by safety distance or with fixed guarding.

**4.2** The design of guards shall take into consideration the risk to the operator, the proper functioning of the machine and the generation of other hazards such as drainage, avoidance of debris accumulation or blockages and the impediment of a machine's material handling functions.

**4.3** Guards shall be designed such that normal operation and service of the machine can be readily carried out.