October 2010

DIN EN ISO 13855

DIN

ICS 13.110

Supersedes
DIN EN 999:2008-10
See start of validity

Safety of machinery – Positioning of safeguards with respect to the approach speeds of parts of the human body (ISO 13855:2010) English translation of DIN EN ISO 13855:2010-10

Sicherheit von Maschinen –
Anordnung von Schutzeinrichtungen im Hinblick auf Annäherungsgeschwindigkeiten von Körperteilen (ISO 13855:2010)
Englische Übersetzung von DIN EN ISO 13855:2010-10

Sécurité des machines –
Positionnement des moyens de protection par rapport à la vitesse d'approche des parties du corps (ISO 13855:2010)
Traduction anglaise de DIN EN ISO 13855:2010-10

Document comprises 49 pages

Translation by DIN-Sprachendienst.
In case of doubt, the German-language original shall be considered authoritative.

A comma is used as the decimal marker.

Start of validity

This standard is valid from 1 October 2010.

National foreword

This standard includes safety requirements within the meaning of the *9. Verordnung zum Geräte- und Produktsicherheitsgesetz* (GPSG) (Ninth Ordinance to the Equipment and Product Safety Act).

This standard has been prepared by Technical Committee ISO/TC 199 “Safety of Machinery” in collaboration with Technical Committee CEN/TC 114 “Safety of Machinery” in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement). Germany holds the secretariats of both Technical Committees.

The responsible German body involved in its preparation was the *Normenausschuss Sicherheitstechnische Grundsätze* (Safety Design Principles Standards Committee), Working Committee NA 095-01-04 GA *Schutzeinrichtungen, Sicherheitsmaßnahmen und Verriegelungen.*

The DIN Standards corresponding to the International Standards referred to in this document are as follows:

ISO 12100-1	DIN EN ISO 12100-1
ISO 13857	DIN EN ISO 13857
ISO 14121-1	DIN EN ISO 14121-1
IEC 61496-1	DIN EN 61496-1

Amendments

This standard differs from DIN EN 999:2008-10 as follows:

a) new terms have been included: “indirect approach” (3.1.5), “circumventing the detection zone” (3.1.6), “termination of the hazardous machine function” (3.1.7), “detection zone” (3.1.8), “minimum distance” (3.1.9) and “intrusion distance” (3.1.10);

b) Subclause 3.2 “Symbols and abbreviated terms” has been added;

c) Clause 6 relating to the calculation of minimum distances to hazard zones has been extended;

d) Clause 9 “Interlocking guards without guard locking” has been added;

e) the former Subclause 6.1.4 “Multiple separate beams” has been incorporated in a new informative Annex E “Number of beams and their height above the reference plane”;

f) Annex A (informative) “Worked examples” has been revised and extended;

g) Annex B (informative) “Termination of hazardous machine functions” has been added;

h) Annex C “Example for considering indirect approaches” and Annex D “Measurement and calculation of overall system stopping performance” (both informative) have been added;

i) the standard has been editorially revised.

Previous editions

DIN EN 999: 1998-12, 2008-10

National Annex NA
(informative)

Bibliography

DIN EN ISO 12100-1, *Safety of machinery — Basic concepts, general principles for design — Part 1: Basic terminology, methodology*

DIN EN ISO 13857, *Safety of machinery — Safety distances to prevent hazard zones being reached by upper and lower limbs*

DIN EN ISO 14121-1, *Safety of machinery — Risk assessment — Part 1: Principles*

DIN EN 61496-1, *Safety of machinery — Electro-sensitive protective equipment — Part 1: General requirements and tests* (IEC 61496-1:2004, modified)

— This page is intentionally blank —

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 13855

May 2010

ICS 13.110

Supersedes EN 999:1998+A1:2008

English Version

Safety of machinery - Positioning of safeguards with respect to the approach speeds of parts of the human body (ISO 13855:2010)

Sécurité des machines - Positionnement des moyens de protection par rapport à la vitesse d'approche des parties du corps (ISO 13855:2010)

Sicherheit von Maschinen - Anordnung von Schutzeinrichtungen im Hinblick auf Annäherungsgeschwindigkeiten von Körperteilen (ISO 13855:2010)

This European Standard was approved by CEN on 22 April 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 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 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, Slovenia, 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

Ref. No. EN ISO 13855:2010: E

Contents

Page