



BSI Standards Publication

Tanks for transport of dangerous goods - Digital interface for product recognition devices for liquid fuels

National foreword

This British Standard is the UK implementation of EN 14116:2012+A2:2018. It supersedes BS EN 14116:2012+A1:2014, which is withdrawn.

The start and finish of text introduced or altered by amendment is indicated in the text by tags. Tags indicating changes to CEN text carry the number of the CEN amendment. For example, text altered by CEN amendment A1 is indicated by A1 A1.

The UK participation in its preparation was entrusted to Technical Committee AUE/18, Tanks for the transport of dangerous goods.

A list of organizations represented on this committee can be obtained on request to its secretary.

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English Version

Tanks for transport of dangerous goods - Digital interface for product recognition devices for liquid fuels

Citernes destinées au transport de matières
dangereuses - Interface numérique du dispositif de
reconnaissance de produits pétroliers

Tanks für die Beförderung gefährlicher Güter - Digitale
Schnittstelle für das Produkterkennungssystem für
flüssige Kraft- und Brennstoffe

This European Standard was approved by CEN on 7 August 2014 and includes Amendment 2 approved by CEN on 28 December 2017.

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European foreword

This document (EN 14116:2012+A2:2018) has been prepared by Technical Committee CEN/TC 296 “Tanks for the transport of dangerous goods”, 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of an identical text or by endorsement, at the latest by December 2018, and conflicting national standards shall be withdrawn at the latest by December 2018.

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 includes Amendment 1, approved by CEN on 2014-08-07 and Amendment 2, approved by CEN on 2017-12-28.

This document supersedes A1 EN 14116:2012+A1:2014 A1.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1 and A2 A2.

A1 *deleted text* A1

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

Product recognition, the subject of this European Standard, is the digital interface that allows product data and/or other information to be transferred between transport tanks and other installations.

A2 *deleted text* A2

1 Scope

This European Standard covers the digital interface at the product loading and/or discharge coupling which is used for the transfer of product related information and specifies the performance requirements, critical safety aspects and tests to provide compatibility of devices.

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.

EN 13616:2004, *Overfill prevention devices for static tanks for liquid petroleum fuels*

EN 15208, *Tanks for transport of dangerous goods — Sealed parcel delivery systems — Working principles and interface specifications*

EN 60079-0, *Explosive atmospheres — Part 0: Equipment — General requirements (IEC 60079-0)*

EN 60079-11, *Explosive atmospheres — Part 11: Equipment protection by intrinsic safety “i” (IEC 60079-11)*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

ISO 8601, *Data elements and interchange formats — Information interchange — Representation of dates and times*

3 Terms, definitions and abbreviations

3.1 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

3.1.1

message

defined data set

3.1.2

telegram

frame that contains at least one standardised message

3.1.3

maximum input voltage

U_i

according to EN 60079-11

3.1.4

maximum output voltage

U_0

according to EN 60079-11