

norm

NEN-EN 13616-2

Overfill prevention devices for static tanks for liquid fuels - Requirements and test/assessment methods - Part 2: Overfill prevention devices without closure device

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Voorbeeld
Preview

August 2013

ICS 23.020.10

Will supersede EN 13616:2004

English Version

Overfill prevention devices for static tanks for liquid fuels - Requirements and test/assessment methods - Part 2: Overfill prevention devices without closure device

Dispositifs limiteurs de remplissage pour réservoirs
 statiques pour carburants pétroliers liquides - Exigences et
 méthodes d'essai/d'évaluation - Partie 2: Dispositifs
 limiteurs de remplissage sans dispositifs de fermeture

Überfüllsicherungen für ortsfeste Tanks für flüssige Brenn-
 und Kraftstoffe - Anforderungen und Prüf-
 /Bewertungsverfahren - Teil 2: Überfüllsicherungen ohne
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Voorbeeld
 Preview

Foreword

This document (prEN 13616-2:2013) has been prepared by Technical Committee CEN/TC 393 "Equipment for storage tanks and for filling stations", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document, together with prEN 13616-1 and prEN 16657, will supersede EN 13616:2004.

According to EN 13616:2004, the following fundamental changes are given:

- splitting of EN 13616:2004; the new EN 13616, under the general title *Overfill prevention devices for static tanks for liquid fuels - Requirements and test/assessment methods*, will consist of the following parts:
 - *Part 1: Overfill prevention devices with closure device;*
 - *Part 2: Overfill prevention devices without closure device.*
- reference to EN 14116;
- explosion-technical parameters updated;
- the requirements for the equipment of the overfill prevention devices without closure device on the static tank are fixed in prEN 13616-2;
- the requirements for the equipment of the overfill prevention devices without closure device on the tank vehicle were shifted to prEN 16657, *Tanks for the transport of dangerous goods — Transport tank equipment for overfill prevention devices for static tanks.*

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 Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Annexes A and ZA are informative.

Introduction

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Voorbereid
Preview

prEN 13616-2:2013 (E)**1 Scope**

This European Standard specifies requirements and the corresponding test/assessment methods applicable to overfill prevention devices without closure device.

The overfill prevention device is usually composed of

- sensor,
- electric-mechanical interface.

These overfill prevention devices intended to be used in/with underground or above ground, non-pressurised, metallic or non-metallic, static tanks designed for liquid fuels.

NOTE In further text, for liquid fuels the term liquid is used.

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 590, *Automotive fuels — Diesel — Requirements and test methods*

prEN 13616-1, *Overfill prevention devices for static tanks for liquid fuels — Requirements and test/assessment methods — Part 1: Overfill prevention devices with closure device*

EN 14879-4:2007, *Organic coating systems and linings for protection of industrial apparatus and plants against corrosion caused by aggressive media — Part 4: Linings on metallic components*

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

EN 60079-11, *Explosive atmospheres — Part 11: Equipment protection by intrinsic safety "i"*

EN 61000-6-2:2005, *Electromagnetic compatibility (EMC) — Part 6-2: Generic standards — Immunity for industrial environments (IEC 61000-6-2:2005)*

EN 61000-6-3:2007+A1:2011, *Electromagnetic compatibility (EMC) — Part 6-3: Generic standards — Emission standard for residential, commercial and light industrial environments (IEC 61000-6-3:2006 + A1:2010)*

EN ISO 13849-1, *Safety of machinery — Safety-related parts of control systems — Part 1: General principles for design*

prEN 16657, *Tanks for the transport of dangerous goods — Transport tank equipment for overfill prevention devices for static tanks*

3 Terms, definitions and abbreviated terms

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

3.1**overfill prevention device**

device forming part of a supply system which automatically stops the delivery, preventing the liquid level in the tank exceeding a maximum filling level

3.2 maximum filling level

L_{\max}

permitted filling level authorised by the local safety regulations

3.3 supply system

connection hoses, fittings and any fixed pipework through which the liquid is delivered to the static tank from any tank-vehicle

Note 1 to entry: The supply system includes both tank vehicle and stationary tank equipment.

3.4 tank-vehicle

vehicle built to carry liquids in tanks comprising one or more compartments intended for discharge to static tanks

3.5 level

L_1

level at which the sensor for overfill prevention device is wetted

3.6 liquid level detection device (sensor)

device mounted in a tank for detecting liquid at a predetermined level

3.7 permissive

signal causing the permission of liquid delivery

3.8 non-permissive

signal causing the prevention of liquid delivery

3.9 residual volume

amount of liquid which is in the supply system at the moment of shutdown

3.10 interface

point of transfer of specified information

3.11 PID

Product Identification Device

3.12

T_{amb}

ambient temperature

3.13

T_{liq}

liquid temperature

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