

**Bensiinijaamad. Kütusetankurites kasutatavate
automaatpihustite valmistamine ja jõudlus**

**Petrol filling stations - Construction and performance of
automatic nozzles for use on fuel dispensers**

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 13012:2012 sisaldab Euroopa standardi EN 13012:2012 ingliskeelset teksti.	This Estonian standard EVS-EN 13012:2012 consists of the English text of the European standard EN 13012:2012.
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English Version

Petrol filling stations - Construction and performance of automatic nozzles for use on fuel dispensers

Stations-service - Construction et performances des
pistolets automatiques de remplissage utilisés sur les
distributeurs de carburant

Tankstellen - Anforderungen an Bau und Arbeitsweise von
automatischen Zapfventilen für die Benutzung an
Zapfsäulen

This European Standard was approved by CEN on 10 May 2012.

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Foreword

This document (EN 13012:2012) has been prepared by Technical Committee CEN/TC 393 “Equipment for tanks and filling stations”, the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by December 2012, and conflicting national standards shall be withdrawn at the latest by December 2012.

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 supersedes EN 13012:2001.

Compared with the EN 13012:2001 version, the following fundamental changes have been made:

- a) a new note at the end of the scope was added: ‘Fuels other than of Explosion Group IIA are excluded from this European Standard’;
- b) an informative Annex C concerning environmental aspects was added.

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.

For relationship with EU Directives, see informative Annex ZA, which is an integral part of this document.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies safety and environmental requirements for the construction and performance of nozzles to be fitted to metering pumps and dispensers installed at filling stations and which are used to dispense liquid fuels into the tanks of motor vehicles, boats and light aircraft and into portable containers, at flow rates up to 200 l min⁻¹.

The requirements apply to automatic nozzles dispensing flammable liquid fuels at ambient temperatures from –20 °C to +40 °C with the possibility for an extended temperature range.

This European Standard does not apply to equipment dispensing liquefied petroleum gas nor compressed natural gas.

This European Standard does not include any requirements for metering performance, such as may be specified under the Measuring Instruments Directive, nor those requirements specified under the Electromagnetic Compatibility Directive.

Vapour recovery efficiency rates are not considered within this European Standard.

NOTE 1 This European Standard does not apply to equipment for use with liquefied petroleum gas (LPG) or liquefied natural gas (LNG) or compressed natural gas (CNG).

NOTE 2 Fuels other than of Explosion Group IIA are excluded from this European Standard.

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 976–1:1997, *Underground tanks of glass-reinforced plastics (GRP) — Horizontal cylindrical tanks for the non-pressure storage of liquid petroleum based fuels — Part 1: Requirements and test methods for single wall tanks*

EN 1360, *Rubber and plastic hoses and hose assemblies for measured fuel dispensing systems — Specification*

EN 13463–1:2009, *Non-electrical equipment for potentially explosive atmospheres — Part 1: Basic method and requirements*

EN 13617–2, *Petrol filling stations — Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers*

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

EN 60204–1:2006, *Safety of machinery — Electrical equipment of machines — Part 1: General requirements (IEC 60204–1:2005, modified)*

EN ISO 228–1, *Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation (ISO 228-1)*

ISO 261, *ISO general purpose metric screw threads — General plan*

ISO 965–2, *ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality*

ISO 9158, *Road vehicles — Nozzle spouts for unleaded gasoline*

ISO 9159, *Road vehicles — Nozzle spouts for leaded gasoline and diesel fuel*

ISO 11925-3, *Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 3: Multi-source test*

3 Terms and definitions

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

3.1

nozzle

automatic delivery nozzle which is a manually operated device that controls the flow of fuel during a dispensing operation and includes a spout and an automatic shut-off mechanism

3.2

vapour recovery nozzle

delivery nozzle that additionally includes a path through which vapour can be recovered

3.3

automatic shut-off

function that automatically stops the fluid flow to prevent overfilling

3.4

attitude device

means to prevent delivery unless the spout is pointing down

3.5

automatic de-activating mechanism

means to prevent flow if the system is re-energized while the operating lever is in an open position

3.6

operating device

mechanism by which the main valve is controlled by the user

3.7

main valve

device controlling the fluid flow

3.8

latch

mechanism to hold the operating lever in an open position

3.9

guard

structure to protect the operating lever

3.10

spout

device to guide the flow of fluid into a tank of a motor vehicle, boat and light aircraft or portable container

3.11

check valve

device to restrict the hose draining through the nozzle