



NSAI
Standards

Irish Standard
I.S. EN 13617-2:2012

Petrol filling stations - Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers

I.S. EN 13617-2:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWIFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces:
EN 13617-2:2004

This document is based on: EN 13617-2:2012
Published: 30 March, 2012

This document was published under the authority of the NSAI and comes into effect on:
30 March, 2012

ICS number:

75.200

NSAI
1 Swift Square,
Northwood, Santry
Dublin 9

T +353 1 807 3800
F +353 1 807 3838
E standards@nsai.ie
W NSAI.ie

Sales:
T +353 1 857 6730
F +353 1 857 6729
W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

English Version

Petrol filling stations - Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers

Stations-service - Partie 2: Exigences de sécurité relatives à la construction et aux performances des raccords cassants utilisés pour les distributeurs de carburant

Tankstellen - Teil 2: Sicherheitstechnische Anforderungen an Bau- und Arbeitsweise von Abreißkupplungen für Zapfsäulen und druckversorgte Zapfsäulen

This European Standard was approved by CEN on 28 January 2012.

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-CENELEC 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-CENELEC 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, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions	5
4 Explosion protection measures	5
5 Construction.....	5
5.1 General.....	5
5.2 Hose breaks.....	6
5.3 Inlet threads.....	6
5.3.1 Safe break type 1	6
5.3.2 Safe break type 2	6
6 Physical properties.....	7
7 Operational requirements	8
8 Overview of tests	9
9 Information for use	10
9.1 General.....	10
9.2 Marking and instruction	10
Annex A (normative) General requirements of test.....	11
A.1 General.....	11
A.2 Tightness test 1.....	11
A.3 Pressure separation test 1	11
Annex B (normative) Tests.....	12
B.1 Test liquid	12
B.2 Fuel compatibility pre-conditioning.....	12
B.3 Pre-conditioning mechanical impact test of re-usable safe breaks	12
B.4 Tightness test 2.....	12
B.5 Pressure separation test 2.....	13
B.6 Pressure test	13
B.7 Axial separation force test 1	13
B.8 Axial separation force test 2 to nozzle breaks and pump breaks.....	13
B.9 Non-axial separation force test 1 to nozzle breaks and pump breaks	14
B.10 Non-axial separation force test 2 to nozzle breaks and pump breaks	14
B.11 Axial separation force test 3.....	14
B.12 Axial separation force test 4.....	14
B.13 Liquid release test	14
B.14 Re-connection test 1	15
B.15 Re-connection test 2	15
B.16 Electrical resistance test.....	15
Annex C (informative) Environmental aspects.....	16
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 94/9/EC	18
Bibliography	19

Foreword

This document (EN 13617-2:2012) 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 September 2012, and conflicting national standards shall be withdrawn at the latest by September 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 13617-2:2004.

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.

According to edition EN 13617-2:2004 the following fundamental changes are given:

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

The present standard is composed of the following parts:

- *Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units;*
- *Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers;*
- *Part 3: Safety requirements for construction and performance of shear valves;*
- *Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers.*

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 requirements for the construction and performance of safe breaks to be fitted to metering pumps and dispensers installed at filling stations and 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 safe breaks at ambient temperatures from -20 °C to +40 °C with the possibility for an extended temperature range.

It pays particular attention to electrical, mechanical and hydraulic characteristics of, and electrical apparatus incorporated within or mounted on, the safe break.

This European Standard applies mainly to hazards related to the ignition of liquid fuels being dispensed or their vapour. This European Standard also addresses electrical and mechanical hazards.

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 228, *Automotive fuels — Unleaded petrol — Requirements and test methods*

EN 1127-1, *Explosive atmospheres — Explosion prevention and protection — Part 1: Basic concepts and methodology*

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

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

EN 13483, *Rubber and plastic hoses and hose assemblies with internal vapour recovery for measured fuel dispensing systems — Specification*

prEN 13617-1:2010, *Petrol filling stations — Part 1: Safety requirements for the construction and performance of metering pumps, dispensers and remote pumping units*

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

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)*

EN ISO 1825, *Rubber hoses and hose assemblies for aircraft ground fuelling and defuelling — Specification (ISO 1825)*

EN ISO 8031:2009, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity (ISO 8031:2009)*

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

This is a free preview. Purchase the entire publication at the link below:

[Product Page](#)

-
- [Looking for additional Standards? Visit Intertek Inform Infostore](#)
 - [Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation](#)
-