BS EN 13617-2:2021

BSI Standards Publication

Petrol filling stations

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

National foreword

This British Standard is the UK implementation of EN 13617-2:2021. It supersedes BS EN 13617-2:2012, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee PVE/393, Equipment for storage tanks and filling stations.

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

This publication has been prepared under a mandate given to the European Standards Organizations by the European Commission and the European Free Trade Association. It is intended to support requirements of the EU legislation detailed in the European Foreword. A European Annex, usually Annex ZA or ZZ, describes how this publication relates to that EU legislation.

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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 carburants

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

This European Standard was approved by CEN on 14 June 2021.

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European foreword

This document (EN 13617-2:2021) 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 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of an identical text or by endorsement, at the latest by March 2022, and conflicting national standards shall be withdrawn at the latest by March 2024.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 13617-2:2012.

In comparison with the 2012 edition, the following significant changes were made:

— safe breaks for aqueous urea solution added;

— Table 1 corrected to ensure compatibility between components according to EN 13012:2021, EN 13617-2:2021, EN 13617-4:2021 and EN 1360:2013;

— the production acceptance tests are modified to test at least every 500th unit;

— the liquid compatibility preconditioning fluid for fuel safe breaks is defined in EN 13617-1.

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 2014/34/EU.

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

EN 13617 consists of four 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.*

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1 Scope

This document 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 and aqueous urea solution into the tanks of motor vehicles, boats and light aircraft and into portable containers at flow rates up to 200 $l \cdot min^{-1}$.

This document applies to fuels of subdivision Group IIA according to EN ISO/IEC 80079-20-1 and also aqueous urea solution according to ISO 22241-1.

The requirements apply to safe breaks at ambient temperatures from −20 °C to +40 °C with the possibility for an extended temperature range.

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

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

This document does not apply to equipment dispensing compressed or liquefied gases.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1127-1:2019, *Explosive atmospheres - Explosion prevention and protection - Part 1: Basic concepts and methodology*

EN 1360:2013, *Rubber and plastic hoses and hose assemblies for measured fuel dispensing systems - Specification*

EN 13483:2013, *Rubber and plastic hoses and hose assemblies with internal vapour recovery for measured fuel dispensing systems - Specification*

EN 13617-1:2021, *Petrol filling stations - Part 1: Safety requirements for construction and performance of metering pumps, dispensers and remote pumping units*

EN IEC 60079-0:2018, *Explosive atmospheres - Part 0: Equipment - General requirements (IEC 60079-0:2017)*

EN ISO 228-1:2003, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1:2000)*

EN ISO 1825:2017, *Rubber hoses and hose assemblies for aircraft ground fuelling and defuelling - Specification (ISO 1825:2017)*

EN ISO 8031:2020, *Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity (ISO 8031:2020)*

EN ISO 80079-36:2016, *Explosive atmospheres - Part 36: Non-electrical equipment for explosive atmospheres - Basic method and requirements (ISO 80079-36:2016)*

ISO 261:1998, *ISO general purpose metric screw threads — General plan*