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JA KÄITUSELE

Petrol filling stations - Part 3: Safety requirements for
construction and performance of shear valves

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

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| See Eesti standard EVS-EN 13617-3:2021 sisaldab Euroopa standardi EN 13617-3:2021 ingliskeelset teksti. | This Estonian standard EVS-EN 13617-3:2021 consists of the English text of the European standard EN 13617-3:2021. |
| Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas. | This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation. |
| Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 15.09.2021. | Date of Availability of the European standard is 15.09.2021. |
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English Version

Petrol filling stations - Part 3: Safety requirements for construction and performance of shear valves

Stations-service - Partie 3 : Exigences de sécurité relatives à la construction et aux performances des raccords de sécurité

Tankstellen - Teil 3: Sicherheitstechnische Anforderungen an Bau- und Arbeitsweise von Abscherventilen

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

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Contents

| | Page |
|--|-----------|
| European foreword..... | 4 |
| 1 Scope..... | 5 |
| 2 Normative references..... | 5 |
| 3 Terms and definitions..... | 6 |
| 4 Explosion protection measures..... | 7 |
| 5 Construction..... | 7 |
| 5.1 General requirements..... | 7 |
| 5.2 Specific requirements..... | 7 |
| 5.3 Classes of construction..... | 8 |
| 5.4 Threads..... | 8 |
| 6 Physical properties..... | 8 |
| 7 Operational requirements..... | 8 |
| 8 Tests..... | 10 |
| 8.1 General..... | 10 |
| 8.2 Type tests..... | 10 |
| 8.3 Production acceptance tests..... | 10 |
| 8.4 Routine tests..... | 10 |
| 9 Information for use..... | 11 |
| 9.1 General..... | 11 |
| 9.2 Marking and instruction..... | 11 |
| 10 Environmental aspects..... | 11 |
| Annex A (normative) Instructions — Guide for items to be included in manufacturers' installation and user manual..... | 12 |
| Annex B (normative) Test methods..... | 13 |
| B.1 General requirements..... | 13 |
| B.2 Pressure test of liquid shear valves (routine test)..... | 13 |
| B.3 Main valve test of liquid shear valve (routine test)..... | 13 |
| B.4 Pressure relief valve test (routine test)..... | 14 |
| B.5 Liquid compatibility preconditioning (type test)..... | 14 |
| B.6 Pressure test (type test)..... | 14 |
| B.7 Main valve test (type test)..... | 14 |
| B.8 Check valve test (class I only) (type test)..... | 15 |
| B.9 Pressure relief valve test (class I only) (type test)..... | 15 |
| B.10 Thermal link test 1 (class I and class II only) (type test and production acceptance test)..... | 15 |
| B.11 Thermal link test 2 (class I and class II only) (type test and production acceptance test)..... | 15 |

| | | |
|-------------|--|-----------|
| B.12 | Main valve closure test of liquid shear valves (type test and production acceptance test)..... | 16 |
| B.13 | Main valve closure test of vapour shear valves (type test and production acceptance test)..... | 16 |
| B.14 | Fire resistance test 1 (type test)..... | 16 |
| B.15 | Fire resistance test 2 (type test)..... | 17 |
| B.16 | Pressure test of vapour shear valves (routine test)..... | 17 |
| B.17 | Main valve test of vapour shear valve (routine test)..... | 17 |
| | Annex C (informative) Environmental aspects | 18 |
| | Annex ZA (informative) Relationship between this European Standard and the essential requirements of Directive 2014/34/EU aimed to be covered | 20 |
| | Bibliography | 22 |

European foreword

This document (EN 13617-3:2021) 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 13617-3:2012.

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

- shear valves for aqueous urea solution added;
- testing for vapour shear valves further differentiated from testing for fuel shear valves. Tests B.16, and B.17 are introduced;
- fire resistance test B.14 and B.15 introduced and pass/fail criteria defined in Table 3;
- the liquid compatibility preconditioning fluid for shear valves 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.*

Any feedback and questions on this document should be directed to the users' national standards body. A complete listing of these bodies can be found on the CEN website.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies safety and environmental requirements for the construction and performance of shear valves to be fitted to metering pumps, dispensers, and/or satellite delivery systems installed at petrol 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 $200 \text{ l} \cdot \text{min}^{-1}$.

This document applies to fuels and their vapours 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 shear valves at ambient temperatures from $-20 \text{ }^{\circ}\text{C}$ to $+40 \text{ }^{\circ}\text{C}$ with the possibility for an extended temperature range.

This document pays particular attention to mechanical and hydraulic characteristics.

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

ISO 7-1:1994, *Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation*

ISO 11925-3:1997, *Reaction to fire tests — Ignitability of building products subjected to direct impingement of flame — Part 3: Multi-source test*

ISO 22241-1:2019, *Diesel engines — NO_x reduction agent AUS 32 — Part 1: Quality requirements*