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I.S. EN 13617-3:2012

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

I.S. EN 13617-3:2012

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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 28 January 2012.

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Contents

Page

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

Foreword

This document (EN 13617-3:2012) 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 13617-3:2004.

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 13617-3:2004 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.

Introduction

The function of the shear valve is to prevent continuous liquid or vapour release in the event of impact or fire

1 Scope

This European Standard 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 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 shear valves at ambient temperatures from –20 °C to +40 °C with the possibility for an extended temperature range.

It pays particular attention to mechanical and hydraulic characteristics.

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

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

EN 13617-1:2012, *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 1182, *Reaction to fire tests for products — Non-combustibility test (ISO 1182)*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in prEN 13617–1:2010 and the following apply.

3.1

main valve (liquid)

normally open valve on the inlet side, closing when the shear valve operates

3.2

main valve (vapour)

normally open valve on the outlet side, closing when the shear valve operates

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