STN

Benzínové plniace stanice Časť 4: Bezpečnostné požiadavky na navrhovanie a výrobu otočných kĺbov používaných pri dávkovacích čerpadlách a dávkovačoch

STN EN 13617-4

65 6550

Petrol filling stations - Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 11/21

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English Version

Petrol filling stations - Part 4: Safety requirements for construction and performance of swivels for use on metering pumps and dispensers

Stations-service - Partie 4 : Exigences de sécurité relatives à la construction et aux performances des raccords tournants utilisés sur les distributeurs de carburants

Tankstellen - Teil 4: Sicherheitstechnische Anforderungen an Bau- und Arbeitsweise von Drehgelenken für Zapfsäulen und druckversorgte Zapfsäulen

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

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.

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

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

COII	tents	Page
Euro	pean foreword3	
1	Scope	4
2	Normative references	4
3	Terms and definitions	5
1	Explosion protection measures	5
5	Construction	6
5.1	General	_
5.2 5.3	Connection threads	
	Safe breaks	
6	Physical properties	
7	Functional requirements	8
3	Frequency of testing	8
9	Information for use	9
9.1	General	
9.2	Marking and instruction	9
10	Environmental aspects	10
Annex A (normative) Testing		11
4.1	General	11
4.2	Liquid compatibility pre-conditioning	11
4.3	Endurance	11
4.4	Electrical resistance test	12
4.5	Burst test	12
4.6	Drop test	12
4.7	Leak test	13
Anne	x B (informative) Environmental aspects	14
Anne	x ZA (informative) Relationship between this European Standard and the essential	
	requirements of Directive 2014/34/EU aimed to be covered	16
Bibliography		18

European foreword

This document (EN 13617-4:2021) 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 13617-4:2012.

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

- swivels 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 liquid compatibility preconditioning fluid for fuel swivels 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 requirements for the construction and performance of swivels to be fitted to delivery hose assemblies on 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 $200 \, l \cdot min^{-1}$. It pays particular attention to electrical, mechanical and hydraulic characteristics of swivels.

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

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

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 of swivels.

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 13012:2021, Petrol filling stations - Construction and performance of automatic nozzles for use on fuel dispensers

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 13617-2:2021, Petrol filling stations - Part 2: Safety requirements for construction and performance of safe breaks for use on metering pumps and dispensers

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

ISO 965-2:1998, ISO general purpose metric screw threads — Tolerances — Part 2: Limits of sizes for general purpose external and internal screw threads — Medium quality

ISO 11925-3:1997, 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 — NOx reduction agent AUS 32 — Part 1: Quality requirements

koniec náhľadu – text ďalej pokračuje v platenej verzii STN