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| STN | Hadicové koncovky s prípojkou Časť 7: Spojenie uzavretím vačkou | STN EN 14420-7 63 5450 |
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Hose fittings with clamp units - Part 7: Cam locking couplings

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. 11/22

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English Version

Hose fittings with clamp units - Part 7: Cam locking couplings

Raccords pour flexibles avec demi-coquille - Partie 7 :
Raccords à cames

Schlaucharmaturen mit Klemmfassungen - Teil 7:
Hebelarmkupplungen

This European Standard was approved by CEN on 24 July 2022.

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European foreword

This document (EN 14420-7:2022) has been prepared by Technical Committee CEN/TC 218 “Rubber and plastics hoses and hose assemblies”, the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by February 2023, and conflicting national standards shall be withdrawn at the latest by February 2023.

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 14420-7:2013.

In comparison to EN 14420-7:2013, the following changes have been made:

- In Clause 2, the Normative references have been updated;
- The Scope of the document has been changed.

The EN 14420 series, *Hose fittings with clamp units*, consists of the following parts:

- *Part 1: Requirements, types of fixing and connection, designation and testing*
- *Part 2: Hose side parts of hose tail*
- *Part 3: Clamp units, bolted or pinned*
- *Part 4: Flange connections*
- *Part 5: Threaded connections*
- *Part 6: TW tank truck couplings*
- *Part 7: Cam locking couplings*
- *Part 8: Symmetrical half coupling (Guillemin system)*

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, Türkiye and the United Kingdom.

EN 14420-7:2022 (E)**Introduction**

Cam locking couplings are manufactured worldwide according to the American “military specification” MIL-C-27487. This American standard fixes the coupling side in a limited way, but not the connection side. Other parts like levers, bolts, ring and gaskets are not standardized.

1 Scope

This document specifies the design, materials, dimensions and marking requirements for cam locking couplings that serve as the link between hoses and connections to transport liquids, solids and gases, except liquid gas and steam.

For all sizes of aluminium cast material couplings and for all couplings of size DN 100, the pressure range is from -0,8 bar to 10 bar in the working temperature range from -20 °C to +65 °C. All other couplings according to this document are capable of operating within the pressure range from 0,8 bar¹ to 16 bar in the working temperature range from -20 °C to +65 °C.

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 755-2, *Aluminium and aluminium alloys - Extruded rod/bar, tube and profiles - Part 2: Mechanical properties*

EN 1706, *Aluminium and aluminium alloys - Castings - Chemical composition and mechanical properties*

EN 1982, *Copper and copper alloys - Ingots and castings*

EN 10088-1, *Stainless steels - Part 1: List of stainless steels*

EN 10213, *Steel castings for pressure purposes*

EN 10226-1, *Pipe threads where pressure tight joints are made on the threads - Part 1: Taper external threads and parallel internal threads - Dimensions, tolerances and designation*

EN 12420, *Copper and copper alloys - Forgings*

EN 14420-1:2013, *Hose fittings with clamp units - Part 1: Requirements, types of fixing and connection, designation and testing*

EN 14420-2, *Hose fittings with clamp units - Part 2: Hose side parts of hose tail*

EN 14420-5, *Hose fittings with clamp units - Part 5: Threaded connections*

EN 22768-1, *General tolerances - Part 1: Tolerances for linear and angular dimensions without individual tolerance indications (ISO 2768-1)*

EN 22768-2², *General tolerances - Part 2: Geometrical tolerances for features without individual tolerance indications (ISO 2768-2)*

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)*

¹ 1 bar = 0,1 MPa.

² EN 22768-2 has been withdrawn and replaced by EN ISO 22081.

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EN ISO 683-1, *Heat-treatable steels, alloy steels and free-cutting steels - Part 1: Non-alloy steels for quenching and tempering (ISO 683-1)*

EN ISO 8330, *Rubber and plastics hoses and hose assemblies - Vocabulary (ISO 8330)*

ISO 272, *Fasteners — Hexagon products — Widths across flats*

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