

Hose fittings with clamp units - Part 4: Flange connections

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 14420-4:2022 sisaldab Euroopa standardi prEN 14420-4 ingliskeelset teksti.	This Estonian standard EVS-EN 14420-4:2022 consists of the English text of the European standard prEN 14420-4.
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 31.08.2022.	Date of Availability of the European standard is 31.08.2022.
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English Version

Hose fittings with clamp units - Part 4: Flange connections

Raccords pour flexibles avec demi-coquille - Partie 4 :
Raccordements à bride

Schlaucharmaturen mit Klemmfassungen - Teil 4:
Flanschanschlüsse

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

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European foreword

This document (EN 14420-4:2022) 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of an identical text or by endorsement, at the latest by February 2023, and conflicting national standards shall be withdrawn at the latest by February 2023.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 14420-4:2013.

In comparison to EN 14420-4:2013, the following changes have been made:

- In Clause 2, the normative references have been updated;
- In Figure 1 and Figure 2, the indication of the length L has been deleted;
- In Figure 3 and Figure 4, the indication of the length l_1 and l_2 has been deleted;
- In Clause 4, Table 2 has been deleted;
- In Clause 5, Table 3 and Table 4 have been deleted;
- In Clause 5, Table 5 has been renamed to Table 2 and for the nominal size DN 200, the value s has been updated to 6,3 mm.

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.

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1 Scope

This document specifies requirements for hose tails according to EN 14420-2, with flanges of mating dimensions PN 10/PN 16/PN 25/PN 40 (according to nominal size and pressure stage) according to EN 1092-1, on hose fittings with clamp units according to EN 14420-3.

Maximum working pressure is 25 bar¹; maximum working temperature is 65 °C.

Additionally, flanges are also usable according to EN 14422.

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 573-3, *Aluminium and aluminium alloys - Chemical composition and form of wrought products - Part 3: Chemical composition and form of products*

EN 1092-1, *Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, PN designated - Part 1: Steel flanges*

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

EN 10025-2, *Hot rolled products of structural steels - Part 2: Technical delivery conditions for non-alloy structural steels*

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

EN 10216-1, *Seamless steel tubes for pressure purposes - Technical delivery conditions - Part 1: Non-alloy steel tubes with specified room temperature properties*

EN 10217-1, *Welded steel tubes for pressure purposes - Technical delivery conditions - Part 1: Electric welded and submerged arc welded non-alloy steel tubes with specified room temperature properties*

EN 10283, *Corrosion resistant steel castings*

EN 10250-2, *Open die steel forgings for general engineering purposes - Part 2: Non-alloy quality and special steels*

EN 12163, *Copper and copper alloys - Rod for general purposes*

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 14420-3, *Hose fittings with clamp units - Part 3: Clamp units, bolted or pinned*

¹ 1 bar = 0,1 MPa.

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 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 683-4, *Heat-treatable steels, alloy steels and free-cutting steels - Part 4: Free-cutting steels (ISO 683-4)*

EN ISO 4042, *Fasteners - Electroplated coating systems (ISO 4042)*

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

EN ISO 11666, *Non-destructive testing of welds - Ultrasonic testing - Acceptance levels (ISO 11666)*

EN ISO 15614-1, *Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 1: Arc and gas welding of steels and arc welding of nickel and nickel alloys (ISO 15614-1)*

EN ISO 15614-2, *Specification and qualification of welding procedures for metallic materials - Welding procedure test - Part 2: Arc welding of aluminium and its alloys (ISO 15614-2)*

EN ISO 17636-1, *Non-destructive testing of welds - Radiographic testing - Part 1: X- and gamma-ray techniques with film (ISO 17636-1)*

EN ISO 17636-2, *Non-destructive testing of welds - Radiographic testing - Part 2: X- and gamma-ray techniques with digital detectors (ISO 17636-2)*

EN ISO 17638, *Non-destructive testing of welds - Magnetic particle testing (ISO 17638)*

EN ISO 17640, *Non-destructive testing of welds - Ultrasonic testing - Techniques, testing levels, and assessment (ISO 17640)*

EN ISO 23277, *Non-destructive testing of welds - Penetrant testing - Acceptance levels (ISO 23277)*

EN ISO 23278, *Non-destructive testing of welds - Magnetic particle testing - Acceptance levels (ISO 23278)*

EN ISO 23279, *Non-destructive testing of welds - Ultrasonic testing - Characterization of discontinuities in welds (ISO 23279)*

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