



SLOVENSKI STANDARD

SIST EN 14420-3:2013

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Nadomešča:

SIST EN 14420-3:2005

Cevni fitingi z objemkami - 3. del: Objemke, prite ali pripete

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

Schlaucharmaturen mit Klemmfassungen - Teil 3: Klemmfassungen, verschraubt oder verstiftet

iTeh STANDARD PREVIEW

Raccords pour flexibles avec demi-coquille - Partie 3: Colliers boulonnés ou goupillés

Ta slovenski standard je istoveten z: **EN 14420-3:2013**

[SIST EN 14420-3:2013](http://standards.iteh.ai/SIST/EN/14420-3/2013)

<http://standards.iteh.ai/standards/EN/14420-3/2013/4626-8c89-9869e3db39a0/sist-en-14420-3-2013>

ICS:

23.040.60 Prirobnice, oglavki in spojni elementi Flanges, couplings and joints

SIST EN 14420-3:2013

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 14420-3

July 2013

ICS 23.040.70

Supersedes EN 14420-3:2004

English Version

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

Raccords pour flexibles avec demi-coquille - Partie 3:
Colliers boulonnés ou goupillés

Schlaucharmaturen mit Klemmfassungen - Teil 3:
Klemmfassungen, verschraubt oder verstiftet

This European Standard was approved by CEN on 15 May 2013.

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.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

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Contents

	Page
Foreword.....	3
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Fixing range of clamp units	6
5 Types of clamp units and designations	6
5.1 General.....	6
5.2 Clamp unit K, bolted	7
5.3 Clamp unit S, pinned	8
6 Dimensions and weights.....	9
6.1 Clamp units	9
6.2 Nuts, bolts and pins.....	14
7 Materials	15
7.1 General.....	15
7.2 Clamp shells.....	15
7.3 Bolts and nuts	15
7.4 Pins	16
8 Marking	16
9 Type testing and quality control	16
Bibliography	17

[SIST EN 14420-3:2013](https://standards.iteh.ai/catalog/standards/sist/5c6a80a7-3047-4626-8c89-9869e3db39a0/sist-en-14420-3-2013)
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Foreword

This document (EN 14420-3:2013) 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 January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.

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 14420-3:2004.

In comparison to EN 14420-3:2004, the following changes have been made:

- In Clause 2, the normative references have been updated.
- A new Clause 3 "Terms and definitions" has been added.
- In Clause 4, the note has been deleted.
- In 6.1.1.2, dimensions and tolerances of clamp unit K, bolted, have been revised (see Table 4).
- In 7.2, the requirements for aluminium alloys have been amended.
- In Clause 8, the note has been deleted.
- The Bibliography has been reviewed.
- The standard has been revised editorially.

EN 14420, *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)*

EN 14420-3:2013 (E)

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, Former Yugoslav Republic of Macedonia, 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.

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1 Scope

This European Standard specifies requirements for clamp units for hose couplings according to EN 14420-1 for use with hose tails according to EN 14420-2.

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

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 586-2, *Aluminium and aluminium alloys — Forgings — Part 2: Mechanical properties and additional property requirements*

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

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

EN 10213, *Steel castings for pressure purposes*

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

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

EN ISO 3506-1, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 1: Bolts, screws and studs (ISO 3506-1)*

EN ISO 3506-2, *Mechanical properties of corrosion-resistant stainless steel fasteners — Part 2: Nuts (ISO 3506-2)*

EN ISO 4032, *Hexagon regular nuts (style 1) — Product grades A and B (ISO 4032)*

EN ISO 4042, *Fasteners — Electroplated coatings (ISO 4042)*

EN ISO 4762, *Hexagon socket head cap screws (ISO 4762)*

EN ISO 8330:2008, *Rubber and plastics hoses and hose assemblies — Vocabulary (ISO 8330:2007)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN ISO 8330:2008 and the following apply.

EN 14420-3:2013 (E)

3.1 DN (nominal size)
 alphanumeric designation of size for components of a pipework system, which is used for reference purposes. It comprises the letters DN followed by a dimensionless whole number which is indirectly related to the physical size, in millimetres, of the bore or outside diameter of the end connections

Note 1 to entry: The number following the letters DN does not represent a measurable value and should not be used for calculation purposes except where specified in the relevant standard.

Note 2 to entry: In those standards which use the DN designation system, any relationship between DN and component dimensions should be given, e.g. DN/OD or DN/ID.

[SOURCE: EN ISO 6708:1995, 2.1]

4 Fixing range of clamp units

The pinching range of the clamp units shall be according to Table 1.

Table 1 — Pinching range of clamp units

Dimensions in millimetres

Nominal size DN	Hose inside diameter Tolerances	Hose outside diameter range with shank inserted ^a (fixing range)	
		Clamp unit K, bolted	Clamp unit S, pinned
15	± 0,5	22 to 24	—
20	± 0,5	30 to 33	—
25	± 0,5	36 to 39	36 to 38
32	± 0,5	43 to 46	43 to 45
40	± 0,5	50 to 53	50 to 52
50	± 0,7	63 to 67	63 to 67
65	± 0,8	78 to 82	78 to 81
80	± 0,8	89 to 93	89 to 92
100	± 0,8	114 to 119	115 to 118
150	+ 1,5 - 0,8	167 to 173	—
200	+ 2 - 0,8	222 to 229	—

^a Hose shank shall be according to EN 14420-2.

5 Types of clamp units and designations

5.1 General

The different types are:

- a) clamp unit K, bolted according to 5.2;

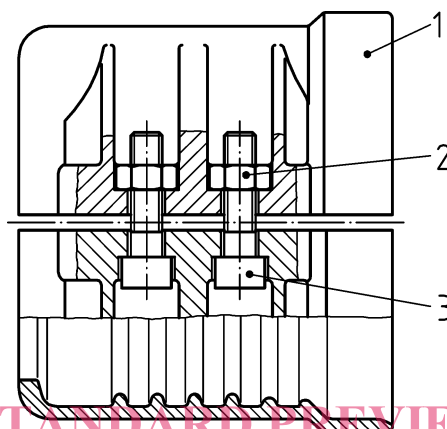
b) clamp unit S, pinned according to 5.3.

NOTE The design of clamp unit K allows for expert adjustment in certain cases.

The clamp unit shells need not comply with Figure 1 to Figure 4, only the dimensions specified need to be complied with.

5.2 Clamp unit K, bolted

A parts list of clamp unit K (Figure 1) is given in Table 2. The dimensions of clamp unit K shall be according to Figure 3 and Table 4.



Key

- 1 clamp unit shell
- 2 hexagon nut
- 3 hexagon socket head screw

SIST EN 14420-3:2013
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Figure 1 — Clamp unit K

Example for an ordering designation of a complete clamp unit K bolted for nominal size DN 50 made of copper-zinc-alloy CW 614 N:

Clamp unit EN 14420-3 — K 50 — CW 614 N

Table 2 — Parts list of clamp unit K

Item No.	Designation	Nominal size DN	Number of parts
1	Clamp unit shell	15 to 200	2
2	Hexagon socket head screw	≤ 100	4
		150	6
		200	8
3	Hexagon nut	≤ 100	4
		150	6
		200	8