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Standards

Irish Standard  
I.S. EN 14420-1:2013

# Hose fittings with clamp units - Part 1: Requirements, types of fixing and connection, designation and testing

## I.S. EN 14420-1:2013

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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*This document replaces:*  
EN 14420-1:2004+A1:2007

*This document is based on:* EN 14420-1:2013  
*Published:* 29 July, 2013

This document was published under the authority of the NSAI and comes into effect on:  
29 July, 2013

**ICS number:**  
23.040.70

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English Version

## Hose fittings with clamp units - Part 1: Requirements, types of fixing and connection, designation and testing

Raccords pour flexibles avec demi-coquille - Partie 1:  
Exigences, types de fixation et connexion, désignation et essais

Schlaucharmaturen mit Klemmfassungen - Teil 1:  
Anforderungen, Arten der Befestigung und Verbindung,  
Bezeichnung und Prüfung

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

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## Foreword

This document (EN 14420-1:2013) 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of an identical text or by endorsement, at the latest by January 2014, and conflicting national standards shall be withdrawn at the latest by January 2014.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 14420-1:2004+A1:2007.

In comparison to EN 14420-1:2004+A1:2007, the following changes have been made:

- In Clause 1, a warning regarding operation has been added.
- In Clause 2, the normative references have been revised.
- Clause 3 "Terms and definitions" has been revised.
- In 4.2, requirements for electrical conductivity of plastic coated hose assemblies has been inserted.
- In 4.3, permissible working pressures for aluminium cast fittings in EN 14420-7 and hose fittings according to EN 14420-8 have been specified.
- Clause 5 "Survey" has been renamed "Types of fixing and connection".
- Clause 7 "Type testing and quality control" has been completely reviewed.
- The Bibliography has been revised.
- 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)*

**I.S. EN 14420-1:2013**

**EN 14420-1:2013 (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.

## 1 Scope

This European Standard specifies requirements, types of fixing and connection, designation and testing for hose fittings with clamp units for hoses made of rubber/plastics or thermoplastics preferably for use with flammable and non-flammable products. It contains requirements for hose fittings to ensure that, when used appropriately, the user or third persons are not exposed to hazards from fire, explosions or acid burns, for example from mineral oils or chemicals, and that the environment is protected from pollution and other detritus.

For maximum working pressure (WP) and temperature see 4.3.

**WARNING — Before decoupling of the quick coupling connections according to Parts 6, 7 and 8, the assembly should be at atmospheric pressure.**

## 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 10204, *Metallic products — Types of inspection documents*

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*

EN 14420-4, *Hose fittings with clamp units — Part 4: Flange connections*

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

EN 14420-6, *Hose fittings with clamp units — Part 6: TW tank truck couplings*

EN 14420-7, *Hose fittings with clamp units — Part 7: Cam locking couplings*

EN 14420-8, *Hose fittings with clamp units — Part 8: Symmetrical half coupling (Guillemin system)*

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)*

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

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

## 3 Terms and definitions

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

### 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.

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