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Irish Standard I.S. EN 14422:2013

## Clamp type coupling assemblies for liquefied petroleum gas (LPG) transfer hoses

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# EUROPEAN STANDARD

### EN 14422

## NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2013

ICS 23.040.70

Supersedes EN 14422:2004

**English Version** 

# Clamp type coupling assemblies for liquefied petroleum gas (LPG) transfer hoses

Raccords avec collier de serrage pour flexibles de transvasement de gaz de pétrole liquéfié (GPL)

Schlaucharmaturen mit Klemmfassung für Schläuche zur Übergabe von Flüssiggas (LPG)

This European Standard was approved by CEN on 8 May 2013.

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

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#### Foreword

This document (EN 14422:2013) 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of an identical text or by endorsement, at the latest by December 2013, and conflicting national standards shall be withdrawn at the latest by December 2013.

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 14422:2004.

In comparison to EN 14422:2004, the following changes have been made:

- The Scope has been extended and the working temperature ranges have been defined for normal and low temperature operation.
- In Clause 2, the normative references have been updated.
- Clause 3 "Terms and definitions" has been amended.
- Clause 4 "Requirements" has been revised.
- In Clause 6, all material lists have been revised.
- In Clause 7, the requirements for marking have been revised.
- Clause 8 regarding type testing and quality control has been restructured and amended.
- The Bibliography has been reviewed.
- The standard has been revised editorially.

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 the dimensions, designation, materials, marking and testing requirements for a range of hose fittings which may be used with rubber/plastic hoses for the transfer of liquefied petroleum gas, LPG, in liquid or vapour phase and natural gas.

The maximum working pressure is 25 bar<sup>1)</sup>.

For normal operation the working temperature range is from -30 °C up to 70 °C and for low temperature operation (LT) it is from -50 °C up to 70 °C.

The nominal size for hose fittings with internal and external threads is from DN 15 to DN 75 and for hose fittings with flanges DN 15 to DN 200.

In addition to the fittings described in this European Standard, threaded connections according to EN 14420-5 as well as hose fittings with screwed ferrules according to EN 14424 up to DN 25 for LPG could be used.

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

EN 1759-1, Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, Class designated — Part 1: Steel flanges, NPS 1/2 to 24

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

EN 10028-2, Flat products made of steels for pressure purposes — Part 2: Non-alloy and alloy steels with specified elevated temperature properties

EN 10087, Free-cutting steels — Technical delivery conditions for semi-finished products, hot-rolled bars and rods

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 10283, Corrosion resistant steel castings

EN 12164, Copper and copper alloys — Rod for free machining purposes

EN 12168, Copper and copper alloys — Hollow rod for free machining purposes

EN 12420, Copper and copper alloys — Forgings

1) 1 bar = 0,1 MPa.



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