This is a free page sample. Access the full version online.

NSAI Standards

Irish Standard
I.S. EN 1762:2017

Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) - Specification

© CEN 2017 No copying without NSAI permission except as permitted by copyright law.

This is a free page sample. Access the full version online.

I.S. EN 1762:2017

Incorporating amendments/corrigenda/National Annexes issued since publication:

The National Standards Authority of Ireland (NSAI) produces the following categories of formal documents:

I.S. xxx: Irish Standard — national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation — recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

This document replaces/revises/consolidates the NSAI adoption of the document(s) indicated on the CEN/CENELEC cover/Foreword and the following National document(s):

NOTE: The date of any NSAI previous adoption may not match the date of its original CEN/CENELEC document.

This document is based on:	*Published:*
EN 1762:2017	2017-03-01

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2017-03-24	23.040.70
	NOTE: If blank see CEN/CENELEC cover page

NSAI	T +353 1 807 3800	Sales:
1 Swift Square,	F +353 1 807 3838	T +353 1 857 6730
Northwood, Santry	E standards@nsai.ie	F +353 1 857 6729
Dublin 9	W NSAI.ie	W standards.ie

Údarás um Chaighdeáin Náisiúnta na hÉireann

This is a free page sample. Access the full version online.

National Foreword

I.S. EN 1762:2017 is the adopted Irish version of the European Document EN 1762:2017, Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) - Specification

This document does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

For relationships with other publications refer to the NSAI web store.

Compliance with this document does not of itself confer immunity from legal obligations.

In line with international standards practice the decimal point is shown as a comma (,) throughout this document.

This is a free page sample. Access the full version online.

This page is intentionally left blank

This is a free page sample. Access the full version online.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 1762

March 2017

ICS 23.040.70

Supersedes EN 1762:2003

English Version

Rubber hoses and hose assemblies for liquefied petroleum gas, LPG (liquid or gaseous phase), and natural gas up to 25 bar (2,5 MPa) - Specification

Tuyaux et flexibles en caoutchouc pour le gaz de pétrole liquéfié GPL (en phase liquide ou gazeuse) et le gaz naturel jusqu'à 25 bar (2,5 MPa) - Spécification

Gummischläuche und -schlauchleitungen für Flüssiggas LPG (flüssig oder gasförmig) und Erdgas bis 25 bar (2,5 MPa) - Spezifikation

This European Standard was approved by CEN on 11 December 2016.

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.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

© 2017 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN 1762:2017 E

This is a free page sample. Access the full version online.

Contents

Page

European foreword ... 4
1 Scope ... 5
2 Normative references ... 5
3 Terms and definitions ... 6
4 Classification ... 6
5 Materials and construction ... 7
5.1 Hose ... 7
5.2 Hose assemblies ... 7
6 Dimensions ... 7
6.1 Nominal bore, internal diameters, outside diameters, tolerances, and minimum bend radius ... 7
Table 1 — Dimensions and tolerances of hoses of types D and D-LT ... 8
Table 2 — Dimensions and tolerances of hoses of types SD, SD-LTS and SD-LTR ... 9
6.2 Minimum thickness of lining and cover ... 9
6.3 Concentricity ... 9
6.4 Tolerances on length ... 9
7 Physical properties ... 10
7.1 Rubber Compounds ... 10
Table 3 — Physical properties of compounds ... 10
7.2 Finished hose and hose assemblies ... 11
Table 4 — Physical properties of finished hose and hose assemblies ... 11
8 Electrical properties ... 12
8.1 General ... 12
8.2 Textile reinforced hoses with bonding wires ... 12
8.3 Textile reinforced hoses with conducting materials ... 13
8.4 Wire helix reinforced hoses ... 13
8.4.1 Grade M-hoses (see 8.2) ... 13
8.4.2 Grade Ω-hoses (see 8.3) ... 13
8.5 Hose assemblies that are required to be discontinuous ... 13
9 Type testing ... 13
10 Frequency of testing ... 13
11 Marking ... 14
11.1 Hoses ... 14
11.2 Hose assemblies ... 14
Annex A (normative) Flammability test ... 15
A.1 Method ... 15
A.2 Assessment ... 15

This is a free page sample. Access the full version online.

Figure A.1 — Arrangement for flammability test 16
Annex B (normative) Test frequency 17
Table B.1 — Type and routine tests 17
Annex C (informative) Test frequency 19
Table C.1 — Recommended test frequency (Production acceptance tests) 19

This is a free page sample. Access the full version online.

European foreword

This document (EN 1762:2017) has been prepared by Technical Committee CEN/TC 218 "Rubber and plastic 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 September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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 1762:2003.

Compared to EN 1762:2003 the following changes have been made:

a) Clause 2: The normative references have been updated;

b) Table 3 has been technically amended (property no. 5); in accordance with corrigendum EN 1762:2003/AC of November 2007.

c) Clause 8.4 has been divided into 8.4.1 and 8.4.2 to clarify the requirements for the 2 different grades of M and Ω hoses

d) Clause 9: The text has been amended editorially;

e) Clause 10: The text has been amended editorially;

f) Clause 11.1: The text has been amended editorially.

Annex A and B are normative. Annex C is informative.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

This is a free page sample. Access the full version online.

1 Scope

This European Standard specifies the requirements for rubber hoses and rubber hose assemblies used for the transfer of liquefied petroleum gas (LPG) in liquid or gaseous phase and natural gas with a maximum working pressure of 25 bar (2,5 MPa) and vacuum within the temperature range of −30 °C to +70 °C and, when designated -LT, −50 °C to +70 °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 1360, *Rubber and plastic hoses and hose assemblies for measured fuel dispensing systems - Specification*

EN ISO 8033, *Rubber and plastics hoses - Determination of adhesion between components (ISO 8033)*

EN ISO 1402, *Rubber and plastics hoses and hose assemblies - Hydrostatic testing (ISO 1402)*

EN ISO 10619-1, *Rubber and plastics hoses and tubing - Measurement of flexibility and stiffness - Part 1: Bending tests at ambient temperature (ISO 10619-1)*

EN ISO 4671, *Rubber and plastics hoses and hose assemblies - Methods of measurement of the dimensions of hoses and the lengths of hose assemblies (ISO 4671)*

EN ISO 10619-2, *Rubber and plastics hoses and tubing - Measurement of flexibility and stiffness - Part 2: Bending tests at sub-ambient temperatures (ISO 10619-2)*

EN ISO 7233, *Rubber and plastics hoses and hose assemblies - Determination of resistance to vacuum (ISO 7233)*

EN ISO 7326, *Rubber and plastics hoses - Assessment of ozone resistance under static conditions (ISO 7326)*

EN ISO 8031, *Rubber and plastics hoses and hose assemblies - Determination of electrical resistance and conductivity (ISO 8031)*

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

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat resistance tests*

ISO 1817, *Rubber, vulcanized or thermoplastic — Determination of the effect of liquids*

ISO 4649, *Rubber, vulcanized or thermoplastic — Determination of abrasion resistance using a rotating cylindrical drum device*

SAI GLOBAL

This is a free preview. Purchase the entire publication at the link below:

Product Page

Looking for additional Standards? Visit Intertek Inform Infostore

Learn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation