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

NSAI Standards

Irish Standard
I.S. EN ISO 6808:2014

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids - Specification (ISO 6808:2014)

© CEN 2014 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 ISO 6808:2014

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 ISO 6808:2014	2014-07-02

This document was published under the authority of the NSAI and comes into effect on:	ICS number:
2014-07-19	75.200 83.140.40
	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.

EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN ISO 6808

July 2014

ICS 83.140.40; 75.200

Supersedes EN ISO 6808:2000

English Version

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids - Specification (ISO 6808:2014)

Tuyaux et flexibles en plastique pour aspiration et refoulement basse pression des liquides pétroliers - Spécifications (ISO 6808:2014)

Kunststoffschläuche und Schlauchleitungen für das Ansaugen und Fördern von Flüssigkeiten aus Erdöl bei niedrigem Druck - Spezifikation (ISO 6808:2014)

This European Standard was approved by CEN on 28 May 2014.

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, 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

© 2014 CEN All rights of exploitation in any form and by any means reserved worldwide for CEN national Members.

Ref. No. EN ISO 6808:2014 E

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

Contents

Page

Foreword.....3

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

Foreword

This document (EN ISO 6808:2014) has been prepared by Technical Committee ISO/TC 45 “Rubber and rubber products” in collaboration with 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 2015, and conflicting national standards shall be withdrawn at the latest by January 2015.

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 ISO 6808:2000.

According to the CEN-CENELEC Internal Regulations, the national standards organizations 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.

Endorsement notice

The text of ISO 6808:2014 has been approved by CEN as EN ISO 6808:2014 without any modification.

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.

INTERNATIONAL STANDARD

ISO 6808

Third edition
2014-07-01

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids — Specification

Tuyaux et flexibles en plastique pour aspiration et refoulement basse pression des liquides pétroliers — Spécifications

Reference number
ISO 6808:2014(E)

© ISO 2014

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

COPYRIGHT PROTECTED DOCUMENT

© ISO 2014

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.org
Web www.iso.org

Published in Switzerland

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

Contents

Page

Foreword ... **iv**

Introduction ... **v**

1 Scope ... **1**

2 Normative references ... **1**

3 Terms and definitions ... **2**

4 Classification — Hose types ... **2**

5 Construction and materials — Requirements ... **2**

6 Dimensions and tolerances ... **2**
- 6.1 Diameter ... 2
- 6.2 Length ... 3

7 Physical properties of finished hoses ... **3**
- 7.1 Hydrostatic requirements at standard laboratory temperature ... 3
- 7.2 Hydrostatic requirements at 45 °C ... 3
- 7.3 Change in length (Type 2 only) ... 4
- 7.4 Suction resistance ... 4
- 7.5 Reinforcement fracture ... 4
- 7.6 Minimum bend test ... 5
- 7.7 Cold bend test ... 5
- 7.8 Electrical continuity ... 5

8 Physical properties of the flexible thermoplastics material ... **5**
- 8.1 Loss in mass on heating ... 5
- 8.2 Tensile strength and elongation at break ... 5
- 8.3 Fuel resistance ... 6
- 8.4 Oil resistance ... 6
- 8.5 Resistance to accelerated ageing ... 6

9 Hose assemblies ... **7**
- 9.1 Couplings and method of attachment ... 7
- 9.2 Test for security of coupling ... 7
- 9.3 Electrical bonding ... 7
- 9.4 Electrical wall resistance ... 7

10 Frequency of testing ... **7**

11 Type tests ... **8**

12 Marking ... **8**
- 12.1 Hoses ... 8
- 12.2 Hose assemblies ... 8

Annex A (normative) **Test frequency** ... **9**

Annex B (informative) **Production tests** ... **10**

Annex C (normative) **Reinforcement fracture test** ... **11**

Annex D (normative) **Coupling security test** ... **13**

Bibliography ... **14**

© ISO 2014 – All rights reserved

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

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies*.

This third edition cancels and replaces the second edition (ISO 6808:1999), which has been technically revised with the following changes:

— Throughout the document: Nominal bore was changed to hose size.

— Throughout the document: ISO 1817 Oil No. 3 was changed to IRM 903 oil.

— ISO 471, ISO 1746, and ISO 4672 were replaced by ISO 23529, ISO 10619-1, and ISO 10619-2, respectively.

— Terms and definitions clause was added.

— Type 1 and Type 2 maximum working pressures at 45 °C were corrected.

— Hose construction for electrical bonding was updated.

— Tables 4 and 5: Note b was added.

— 7.2 and Table 5: Changed 55 °C to 45 °C.

— 9.3: Electrical bonding was redefined.

— 9.4: Added electrical wall resistance clause.

— Added frequency of testing clause.

— Added type tests clause.

— Added Annex A — Test frequency.

— Added Annex B — Production tests.

© ISO 2014 – All rights reserved

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

Introduction

This International Standard has been prepared to provide minimum acceptable requirements for the satisfactory performance of polymer-reinforced thermoplastics hoses for suction and discharge applications, conveying kerosene, heating oil, diesel fuel, and lubricating oils. These hoses are neither suitable for conveying automotive or aviation fuel nor suitable for metered delivery of any liquid.

The list of hose sizes given in Tables 1 and 2 is not intended to be restrictive and will not preclude the manufacture of sizes outside the preferred-number range (the basis of the tables) and which might be the subject of individual national standards.

© ISO 2014 – All rights reserved

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

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

Plastics hoses and hose assemblies for suction and low-pressure discharge of petroleum liquids — Specification

WARNING — Persons using this International Standard should be familiar with normal laboratory practice. This International Standard does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

1 Scope

This International Standard specifies the requirements for two types of polymer-reinforced thermoplastics hose and hose assembly for suction and discharge applications with kerosene, heating oil, diesel fuel, and lubricating oils in the temperature range –10 °C to +45 °C.

NOTE The hoses can be stored in a static condition at –30 °C to +65 °C without damage by climatic conditions.

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.

ISO 176:2005, *Plastics — Determination of loss of plasticizers — Activated carbon method*

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

ISO 527-3, *Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets*

ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

ISO 1307, *Rubber and plastics hoses — Hose sizes, minimum and maximum inside diameters, and tolerances on cut-to-length hoses*

ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing*

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

ISO 7233, *Rubber and plastics hoses and hose assemblies — Determination of resistance to vacuum*

ISO 7751, *Rubber and plastics hoses and hose assemblies — Ratios of proof and burst pressure to maximum working pressure*

ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance and conductivity*

ISO 8330, *Rubber and plastics hoses and hose assemblies — Vocabulary*

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

ISO 10619-2:2011, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*

ISO 23529, *Rubber — General procedures for preparing and conditioning test pieces for physical test methods*

© ISO 2014 – All rights reserved

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