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Irish Standard  
I.S. EN ISO 3949:2014

# Plastics hoses and hose assemblies - Textile-reinforced types for hydraulic applications - Specification (ISO 3949:2009)

## I.S. EN ISO 3949:2014

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## Plastics hoses and hose assemblies - Textile-reinforced types for hydraulic applications - Specification (ISO 3949:2009)

Tuyaux et flexibles en plastique - Types hydrauliques avec  
armature textile - Spécifications (ISO 3949:2009)

Kunststoffschläuche und -schlauchleitungen -  
Textilverstärkte Typen für hydraulische Anwendungen -  
Spezifikationen (ISO 3949:2009)

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## **Foreword**

The text of ISO 3949:2009 has been prepared by Technical Committee ISO/TC 45 “Rubber and rubber products” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 3949:2014 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of an identical text or by endorsement, at the latest by January 2015, and conflicting national standards shall be withdrawn at the latest by January 2015.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.

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### **Endorsement notice**

The text of ISO 3949:2009 has been approved by CEN as EN ISO 3949:2014 without any modification.

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# INTERNATIONAL STANDARD

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3949**

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2009-09-01

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## **Plastics hoses and hose assemblies — Textile-reinforced types for hydraulic applications — Specification**

*Tuyaux et flexibles en plastique — Types hydrauliques avec armature  
textile — Spécifications*



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**ISO 3949:2009(E)**

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## **ISO 3949:2009(E)**

### **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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

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.

ISO 3949 was prepared by Technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Hoses (rubber and plastics)*.

This fourth edition cancels and replaces the third edition (ISO 3949:2004), which has been technically revised.

# Plastics hoses and hose assemblies — Textile-reinforced types for hydraulic applications — Specification

## 1 Scope

This International Standard specifies requirements for three types of textile-reinforced thermoplastics hose and hose assembly of nominal size from 3,2 to 25. Each type is divided into two classes dependent on electrical conductivity requirements. They are suitable for use with water-based hydraulic fluids HFC, HFAE, HFAS and HFB as defined in ISO 6743-4 at temperatures ranging from 0 °C to +60 °C and oil-based hydraulic fluids HH, HL, HM, HR and HV as defined in ISO 6743-4 at temperatures ranging from –40 °C to +100 °C;

This International Standard does not include requirements for end fittings. It is limited to the performance of hoses and hose assemblies.

NOTE Operating temperatures in excess of 100 °C may materially reduce the life of the hose.

## 2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

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

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

ISO 4671, *Rubber and plastics hoses and hose assemblies — Methods of measurement of the dimensions of hoses and the lengths of hose assemblies*

ISO 4672:1997, *Rubber and plastics hoses — Sub-ambient temperature flexibility tests*

ISO 6743-4, *Lubricants, industrial oils and related products (class L) — Classification — Part 4: Family H (Hydraulic systems)*

ISO 6803, *Rubber or plastics hoses and hose assemblies — Hydraulic-pressure impulse test without flexing*

ISO 7326:2006, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

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

ISO 8331, *Rubber and plastics hoses and hose assemblies — Guidelines for selection, storage, use and maintenance*

## 3 Terms and definitions

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

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