ICS 23.040.70, 23.100.40, 83.140.40

SLOVENSKÁ TECHNICKÁ NORMA

Január 2019

STN	**Plastové hadice a hadice s koncovkami Hadice vystužené textilom na hydraulické aplikácie Špecifikácia (ISO 3949: 2018)**	**STN EN ISO 3949** 63 5412

Plastics hoses and hose assemblies - Textile-reinforced types for hydraulic applications - Specification (ISO 3949:2018)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 12/18

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EN ISO 3949

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ICS 23.040.70; 23.100.40; 83.140.40 Supersedes EN ISO 3949:2014

English Version

Plastics hoses and hose assemblies - Textile-reinforced types for hydraulic applications - Specification (ISO 3949:2018)

Tuyaux et flexibles en plastique - Types hydrauliques avec armature textile - Spécifications (ISO 3949:2018)

Kunststoffschläuche und -schlauchleitungen - Textilverstärkte Typen für hydraulische Anwendungen - Spezifikationen (ISO 3949:2018)

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European foreword

This document (EN ISO 3949:2018) 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of an identical text or by endorsement, at the latest by January 2019, and conflicting national standards shall be withdrawn at the latest by January 2019.

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.

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Endorsement notice

The text of ISO 3949:2018 has been approved by CEN as EN ISO 3949:2018 without any modification.

INTERNATIONAL STANDARD

ISO 3949

Fifth edition
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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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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).

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For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: www.iso.org/iso/foreword.html

This document was prepared by technical Committee ISO/TC 45, *Rubber and rubber products*, Subcommittee SC 1, *Rubber and plastics hoses and hose assemblies.*

This fifth edition cancels and replaces the fourth edition (ISO 3949:2009), which has been technically revised. The main changes compared to the previous edition are as follows:

— Clause 1 has been updated to be more precise;

— Requirements for type R8, hose nominal size 8 have been added in Tables 1, 3, 4 and 5;

— Reference to method A1 of ISO 10619-1:2017, has been added in 7.3;

— Additional requirement for marking of hoses has been added in 10.1;

— Reference to ISO 17165-1 has been made in 10.2.

INTERNATIONAL STANDARD **ISO 3949:2018(E)**

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

1 Scope

This document 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:

— oil-based hydraulic fluids HH, HL, HM, HR and HV as defined in ISO 6743-4 at temperatures ranging from −40 °C to +93 °C;

— water-based fluids HFC, HFAE, HFAS and HFB as defined in ISO 6743-4 at temperatures ranging from 0 °C to +60 °C

— water at temperatures ranging from 0 °C to +60 °C.

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

NOTE It is the responsibility of the user, in consultation with the hose manufacturer, to establish the compatibility of the hose with the fluid to be used.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 or thermoplastic — 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 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 7326:2016, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions*

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

ISO 10619-1:2017, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 1: Bending tests at ambient temperature*

ISO 10619-2:2017, *Rubber and plastics hoses and tubing — Measurement of flexibility and stiffness — Part 2: Bending tests at sub-ambient temperatures*

ISO 17165-1, *Hydraulic fluid power — Hose assemblies — Part 1: Dimensions and requirements*

