ICS 27.080, 27.200 SLOVENSKÁ TECHNICKÁ NORMA Január 2026

STN	**Chladiace systémy a tepelné čerpadlá Pružné rúrkové časti, tlmiče kmitania, dilatačné spoje a nekovové rúry Požiadavky a klasifikácia (ISO 13971: 2012)**	**STN EN ISO 13971** 14 5109

Refrigeration systems and heat pumps - Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes - Requirements and classification (ISO 13971:2012)

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. 12/25

Obsahuje: EN ISO 13971:2025, ISO 13971:2012

Oznámením tejto normy sa ruší
STN EN 1736 (14 5109) z apríla 2009

141505

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 13971

September 2025

ICS 27.080; 27.200 Supersedes EN 1736:2008

English Version

Refrigeration systems and heat pumps - Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes - Requirements and classification (ISO 13971:2012)

Systèmes de réfrigération et pompes à chaleur - Éléments flexibles de tuyauterie, isolateurs de vibration, joints de dilatation et tubes non métalliques - Exigences et classification (ISO 13971:2012)

Kälteanlagen und Wärmepumpen - Flexible Rohrleitungsteile, Schwingungsabsorber, Kompensatoren und Nichtmetall-Schläuche - Anforderungen und Klassifikation (ISO 13971:2012)

This European Standard was approved by CEN on 22 September 2025.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
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CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN ISO 13971:2025 E

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European foreword

The text of ISO 13971:2012 has been prepared by Technical Committee ISO/TC 86 "Refrigeration and air-conditioning" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 13971:2025 by Technical Committee CEN/TC 182 "Refrigerating systems, safety and environmental requirements" the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by March 2026, and conflicting national standards shall be withdrawn at the latest by March 2026.

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 1736:2008.

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Endorsement notice

The text of ISO 13971:2012 has been approved by CEN as EN ISO 13971:2025 without any modification.

INTERNATIONAL STANDARD

ISO 13971

First edition
2012-09-01

Refrigeration systems and heat pumps — Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes — Requirements and classification

Systèmes de réfrigération et pompes à chaleur — Éléments flexibles de tuyauterie, isolateurs de vibration, joints de dilatation et tubes non métalliques — Exigences et classification

Reference number
ISO 13971:2012(E)

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Published in Switzerland

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.

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ISO 13971 was prepared by Technical Committee ISO/TC 86, *Refrigeration and air-conditioning,* Subcommittee SC 1, *Safety and environmental requirements for refrigerating systems*.

Introduction

Flexible pipe elements are used to eliminate impermissible stresses from refrigerating circuits and absorb pipe expansion or relative movements of components.

Flexible pipe elements are often the weakest part of a refrigerating system and the part most likely to suffer from fatigue or stress corrosion cracking.

INTERNATIONAL STANDARD ISO 13971:2012(E)

Refrigeration systems and heat pumps — Flexible pipe elements, vibration isolators, expansion joints and non-metallic tubes — Requirements and classification

1 Scope

This International standard describes requirements, design and installation of flexible pipe elements (e.g., metallic flexible pipe, metallic flexible tube, vibration isolator, expansion joint) and non-metallic tube used in the refrigerant circuits of refrigerating systems and heat pumps.

It also describes the requirements to qualify the tightness and permeability of non-metallic tubes (e.g., plastic) used in evaporating and/or condensing sides of refrigerating systems and heat pumps.

This International standard does not apply to flexible pipes that are only occasionally stressed beyond the elastic limit (e.g., during repair work), or to joints that are free to rotate or hinge.

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 175, *Plastics — Methods of test for the determination of the effects of immersion in liquid chemicals*

ISO 5149-2, *Refrigerating systems and heat pumps — Safety and environmental requirements — Part 2: Design, construction, testing, marking and documentation*

ISO 6605:2002, *Hydraulic luid power — Hoses and hose assemblies — Test methods*