Krüogeenanumad. Krüogeensed paindvoolikud

Cryogenic vessels - Cryogenic flexible hoses

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12434:2001 sisaldab Euroopa standardi EN 12434:2000 + AC:2001 ingliskeelset teksti. Käesolev dokument on jõustatud 15.01.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12434:2001 consists of the English text of the European standard EN 12434:2000 + AC:2001. This document is endorsed on 15.01.2001 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: This standard gives design, construction, type and production testing, and marking requirements for non insulated cryogenic flexible hose used for the transfer of cryogenic fluids withinthe following range of operating conditions: - working temperature: from - 270 °C to + 65 °C; - maximum nominal pressure: 80 bar; - nominal size (DN): from 10 to 100.	**Scope:** This standard gives design, construction, type and production testing, and marking requirements for non insulated cryogenic flexible hose used for the transfer of cryogenic fluids withinthe following range of operating conditions: - working temperature: from - 270 °C to + 65 °C; - maximum nominal pressure: 80 bar; - nominal size (DN): from 10 to 100.

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Cryogenic vessels

Cryogenic flexible hoses

Récipients cryogéniques – Tuyaux flexibles cryogéniques

Kryo-Behälter – Kryo-Schlauchleitungen

This European Standard was approved by CEN on 2000-07-07.

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Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

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CEN

European Committee for Standardization
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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 134 "Resilient and textile floor coverings", 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 February 2001, and conflicting national standards shall be withdrawn at the latest by February 2001.

This European Standard has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s).

For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this standard.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This standard gives design, construction, type and production testing, and marking requirements for non insulated cryogenic flexible hose used for the transfer of cryogenic fluids within the following range of operating conditions :

— working temperature: from - 270 °C to + 65 °C ;

— maximum nominal pressure: 80 bar ;

— nominal size (DN): from 10 to 100.

End fittings for mounting of any couplings are within the scope of this standard, but the couplings are subject to other standards.

It is intended that the hose be designed and tested to satisfy the generally accepted nominal pressure e.g. PN 40. Hoses may then be selected with a PN equal to or greater than the maximum allowable pressure (PS) of the equipment to which it is to be used.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 1252-1, Cryogenic vessels - Materials - Part 1 : Toughness requirements for temperatures below - 80 °C

EN 1333, Pipework components - Definition and selection of PN

EN 1797-1, Cryogenic vessels - Gas/materials compatibility - Oxygen compatibility

EN 12300, Cryogenic vessels - Cleanliness for cryogenic service

EN ISO 6708, Pipework components - Definition and selection of DN (nominal size) (ISO 6708:1995)

ISO 7369:1995, Pipework - Flexible metallic hoses - Vocabulary of general terms

3 Terms and definitions

For the purposes of this Standard, in addition to those given in ISO 7369:1995, the following terms and definitions apply :

3.1
hose
A flexible leak tight inner tube either corrugated metal, elastomer or plastic.

3.2
braid
A layer, or layers, of cylindrically woven wires covering the hose and attached to the flexible hose assembly end fittings, serving the function of restraining the flexible hose against elongation.

3.3
protection coil or cover
An outer coil or cover fitted to protect the main hose and braid against damage and abrasion.