Vedelikupumbad. Ohutusnõuded. Hüdrostaatilise katsetamise protseduur

Liquid pumps - Safety requirements - Procedure for hydrostatic testing

EESTI STANDARDI EESSÕNA

Käesolev Eesti standard EVS-EN 12162:2001 sisaldab Euroopa standardi EN 12162:2001 ingliskeelset teksti. Käesolev dokument on jõustatud 16.11.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 12162:2001 consists of the English text of the European standard EN 12162:2001. This document is endorsed on 16.11.2001 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

NATIONAL FOREWORD

Käsitlusala: This European Standard describes the hydrostatic test procedure to be applied to pressure containing parts of all types of liquid pumps including any auxiliary equipment making up a pump unit.	**Scope:** This European Standard describes the hydrostatic test procedure to be applied to pressure containing parts of all types of liquid pumps including any auxiliary equipment making up a pump unit.

ICS 23.080

Võtmesõnad: circulation pumps, components, definitions, fluid mechanics, hydrostatics, liquid pumps, mechanical engineering, pressure tests, pumps, safety, safety requirements, testing

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English version

Liquid pumps - Safety requirements - Procedure for hydrostatic testing

Pompes pour liquides - Exigences de sécurité - Procédure d'essai hydrostatique

Flüssigkeitspumpen - Sicherheitstechnische Anforderungen - Prozessverfahren für hydrostatische Druckprüfung

This European Standard was approved by CEN on 18 January 2001.

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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 Management Centre has the same status as the official versions.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Foreword

This European Standard has been prepared by Technical Committee CEN /TC 197, "Pumps", the secretariat of which is held by AFNOR.

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 September 2001, and conflicting national standards shall be withdrawn at the latest by September 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 document.

Annex A is informative.

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.

Introduction

CEN have prepared a series of related machinery safety standards, some of which are to be harmonised European Standards, in order to implement the essential requirements for health and safety set down in the Supply of Machinery (Safety) Directive. This European Standard is one of this series and provides the procedure to be used for a specific verification requirement of EN 809.

The subject of this European Standard is the proving of the integrity of pump parts intended to withstand internal pressure. It refers, therefore, to the in-process testing of pump parts so that each item may be considered to have been examined.

This European standard is a type C standard as stated in EN 1070.

1 Scope

This standard specifies the hydrostatic test procedure to be applied to pressure containing parts of all types of liquid pumps including any auxiliary equipment making up a pump unit as described in the scope of EN 809:1998, except :

— domestic water pumps within the scope of EN 60335-2-41:1996 or EN 60335-2-51:1997 ;

— domestic circulation pumps within the scope of EN 1151:1999 ;

— submersible pumps within the scope of prEN 13386:1998 ;

— fire-fighting pumps with primers within the scope of prEN 1028-1:1993 and prEN 1028-2:1993 ;

— pump parts with a maximum allowable working pressure below 0.1 bar.

Requirements are included for applying an hydrostatic test at different pressures to separate zones within a pump which are subject to different allowable maximum working pressures.

This standard is for pumps and pump units which are placed upon the market after the publication date of the standard.

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 809:1998, *Pumps and pump units for liquids - Common safety requirements.*

prEN 1028-1:1993, *Fire fighting pumps - Fire fighting centrifugal pumps with primer - Part 1 : Classification - General and safety requirements*.

prEN 1028-2:1993, *Fire fighting pumps - Fire fighting centrifugal pumps with primer - Part 2 : Classification - Verification of general and safety requirements*.

EN 1151:1999, *Rotodynamic pumps - Circulation pumps having an electrical effect not exceeding 200 W for heating installations and domestic hot water installations - Requirements, testing, marking.*

EN 12723:2000, *Liquid pumps - General terms for pumps and installations - Definitions, quantities, letter symbols and units.*

prEN 13386:1998, *Liquid pumps - Submersible pumps and pumps units for liquids - Particular safety requirements.*

EN 60335-2-41:1996, *Safety of household and similar electrical appliances - Part 2: Particular requirements for electric pumps for liquids having a temperature not exceeding 35 °C.*

EN 60335-2-51: 1997, *Safety of household and similar electrical appliances - Part 2: Particular requirements for stationary circulation pumps of heating and service water installations.*