EESTI STANDARD EVS-EN 837-2:1999

Manomeetrid. Osa 2: Manomeetrite valiku ja paigalduse soovitused

Pressure gauges - Part 2: Selection and installation recommendations for pressure gauges

EESTI STANDARDIKESKUS

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 837-2:1999 sisaldab Euroopa standardi EN 837-2:1997 ingliskeelset teksti. Käesolev dokument on jõustatud 12.12.1999 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes. Standard on kättesaadav Eesti standardiorganisatsioonist.	This Estonian standard EVS-EN 837-2:1999 consists of the English text of the European standard EN 837-2:1997. This document is endorsed on 12.12.1999 with the notification being published in the official publication of the Estonian national standardisation organisation. The standard is available from Estonian standardisation organisation.

Käsitlusala: See Euroopa standard kehtib ainult nende manomeetrite kohta, mille mõõtesüsteemi survetundlik element on standardites EN 837-1 ja EN 837-3 määratletud metalldetail, mis deformeerub mõõdetava surve mõjul.	**Scope:**

ICS 17.100

Võtmesõnad: hooldamine, ladustamine, manomeetrid, metroloogia, mõõteriistad, paigaldus, surve mõõtmised, tehnilised andmed, valik

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Descriptors: Pressure gauges, gauges, selection, installation.

English version

Pressure gauges

Part 2: Selection and installation recommendations for pressure gauges

Manomètres – Partie 2: Recommandations sur le choix et l'installation des manomètres

Druckmeßgeräte – Teil 2: Auswahl- und Einbauempfehlungen für Druckmeßgeräte

This European Standard was approved by CEN on 1997-01-31.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration.

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.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

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Foreword

This European Standard has been prepared by Technical Committee CEN/TC 141 "Pressure gauges - Thermometers - Means of measuring and/or recording temperature during the distribution of refrigerated, frozen and quick-frozen products", 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 1997, and conflicting national standards shall be withdrawn at the latest by September 1997.

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

This European standard consists of the following parts, under the general title "Pressure gauges":

Part 1 : Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing

Part 2 : Selection and installation recommendations for pressure gauges

Part 3 : Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing.

0 Introduction

Pressure gauges are instruments used for pressure measurement which implies :

- the selection of a gauge suited to the conditions of use ;

- the respect of a certain number of rules and precautions concerning :

  . storage ;
  . installation ;
  . safety in view of the service conditions ;
  . maintenance.

1 Scope

This European standard only applies to those pressure gauges whose pressure responsive element measuring system is a metal part which deforms under the effect of the pressure measured, as defined in EN 837-1 and EN 837-3.

This standard has been prepared to assist in the selection, installation and use of pressure gauges to ensure that they give satisfactory service for the intended application with the maximum level of safety.

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 these publications apply to this part of this European standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

EN 472	1994	Pressure gauges - Vocabulary
EN 837-1	1996	Pressure gauges - Part 1 : Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing
EN 837-3	1996	Pressure gauges - Part 3 : Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing

3 Definitions

For the purpose of this European Standard the definitions given in EN 472 apply.

4 Selection

Following criteria should be considered :

4.1 Selection of pressure sensitive element

The type of pressure responsive element may be selected according to the following table 1 :

Table 1

Reference of the standard	Type of pressure gauge	Pressure range	Process fluid			
			Gas or steam	Liquid		
				Low viscosity	High viscosity	Polluted
EN 837-1	Bourdon tube	0,6 bar to 1 600 bar	x	x	1)	1)
EN 837-3	Diaphragm	2,5 mbar to 25 bar	x	x	x	x
EN 837-3	Capsule	1 mbar to 600 mbar	x	x[2)]		

1) Separators should be used.
2) The capsule and the pipe shall be fully filled with the liquid.