

Manomeetrid. Osa 3: Diafragma- ja membraanmanomeetrid. Mõõtmel, metroloogia, nõuded ja katsetamine

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 837-3:1999 sisaldab Euroopa standardi EN 837-3:1996 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 837-3:1999 consists of the English text of the European standard EN 837-3:1996. 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.
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Käsitlusala: See Euroopa standard määrab kindlaks nõuded diafragmade ja näidikuga membraanmanomeetrite, vaakummeetrite ja kombineeritud manovaakummeetrite (kombineeritud rõhumõõturite) kohta, mille nimimõõde on 50 kuni 250 ning manomeetrilise rõhu mõõtepiirkond on kuni 25 baari.	Scope:
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ICS 17.100

Võtmesõnad: katsed, manomeetrid, metroloogia, metrooloogiline kontroll, mõõteriistad, mõõteskaalad, mõõtmised, näidikuga mõõteriist, pakkimine, surve mõõtmised, tehnilised andmed, tähistus, täpsus

ICS 17.100

Descriptors: Pressure gauges, requirements, testing.

English version

Pressure gauges

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

Manomètres – Partie 3: Manomètres à
membrane et manomètres à capsule –
Dimensions, métrologie, prescriptions
et essais

Druckmeßgeräte – Teil 3: Druckmeßgeräte
mit Platten- und Kapselfedern – Maße,
Meßtechnik, Anforderungen und Prüfung

This European Standard was approved by CEN on 1996-10-30.

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, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the 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 June 1997, and conflicting national standards shall be withdrawn at the latest by June 1997.

This European Standard is a part of the series of the following standards:

- EN 837-1 Pressure gauges - Part 1: Bourdon tube pressure gauges - Dimensions, metrology, requirements and testing;
- EN 837-2 Pressure gauges - Part 2: Selection and installation recommendations for pressure gauges;
- EN 837-3 Pressure gauges - Part 3: Diaphragm and capsule pressure gauges - Dimensions, metrology, requirements and testing.

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.

1 Scope

This European Standard specifies requirements for diaphragm and capsule (designated by D and C respectively, see clause 12) indicating pressure gauges, vacuum gauges and combined vacuum and pressure gauges (compound gauges), from 50 to 250 nominal size with ranges up to 25 bar for the measurement of gauge pressure.

A reading of zero bar is atmospheric pressure. $1 \text{ bar} = 10^5 \text{ Pa}$.

Gauges specified have circular dials with concentric scales for industrial use.

The standard includes methods of test for performance to be applied at type approval and production piece tests.

The standard applies to gauges suitable for industrial use with common industrial fluids. It does not apply to pressure gauges for oxygen or acetylene use nor gauges with electrical contacts.

Pressure gauges for welding, cutting and associated processes are not included in this standard, but are specified in EN 562.

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 European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies.

ANSI/ASME B1.20.1

Pipe threads, general purpose (inch)

EN 472 : 1994

Pressure gauges – Vocabulary

EN 562 : 1994

Gas welding equipment – Pressure gauges used for welding, cutting and allied processes

EN 60529 : 1991

Degrees of protection provided by enclosures

EN 60068-2-6 : 1995

Electrical engineering; basic environmental testing procedures – Part 2: Tests - Test Fc and guidance: Vibration (sinusoidal)

EN 60068-2-27 : 1993

Electrical engineering; basic environmental testing procedures – Part 2: Tests - Test Ea and guidance: Shock

ISO 228-1 : 1994

Pipe threads where pressure-tight joints are not made on the threads – Part 1: Dimensions tolerances and designation

ISO 1302 : 1992

Technical drawings – Methods of indicating surface texture on drawings

EN 22768-1 : 1993

General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indications

ISO 2859-1 : 1989

Sampling procedures for inspection by attributes – Part 1: Sampling plans indexed by acceptable quality level (AQL) for lot-by-lot inspection

ISO 7000 : 1989

Motor vehicles; Graphic symbols – Principles, synopsis

ISO 10102 : 1990

Assembly tools for screws and nuts – Double-headed open-ended engineers' wrenches

3 Definitions

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