

Madala survega mittereguleeritavad regulaatorid, mille väljundsurve on maksimaalselt väiksem või võrdne 200 mbar-iga, mille võimsus on väiksem või võrdne 4 kg/h ning seonduvad ohutusseadmed butaani, propaani või nende segude suhtes

Low-pressure, non adjustable regulators having a maximum outlet pressure of less than or equal to 200 mbar, with a capacity of less than or equal to 4 kg/h, and their associated safety devices for butane, propane or their mixtures

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 12864:2003 sisaldab Euroopa standardi EN 12864:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 12864:2003 consists of the English text of the European standard EN 12864:2001.
Käesolev dokument on jõustatud 19.03.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 19.03.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.
Standard on kättesaadav Eesti standardiorganisatsioonist.	The standard is available from Estonian standardisation organisation.

Käsitlusala: This european standard defines the structural and operational characteristics, the safety requirements and test methods, the marking, of low-pressure, non adjustable regulators for butane, propane or their mixtures, referred to in the body of the text as "regulators". This European Standard covers regulators supplied at vapour pressure by one or several portable cylinders. They are normally directly connected to the cylinder valve or the self closing valve.	Scope: This european standard defines the structural and operational characteristics, the safety requirements and test methods, the marking, of low-pressure, non adjustable regulators for butane, propane or their mixtures, referred to in the body of the text as "regulators". This European Standard covers regulators supplied at vapour pressure by one or several portable cylinders. They are normally directly connected to the cylinder valve or the self closing valve.
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ICS 23.060.40

Võtmesõnad: humidity, liquefied petroleum ga, materials, mechanical properties, moisture, pressure control, pressure regulation installations, pressure regulators, propane, regulating devices, seals, specification (approval), specifications, stoppers, testing, valves

ICS 23.060.40

English version

Low-pressure, non adjustable regulators having a maximum outlet pressure of less than or equal to 200 mbar, with a capacity of less than or equal to 4 kg/h, and their associated safety devices for butane, propane or their mixtures

Détendeurs à réglage fixe, à pression de détente maximale inférieure ou égale à 200 mbar, de débit inférieur ou égal à 4 kg/h, et leurs dispositifs de sécurité associés pour butane, propane ou leurs mélanges

Festeingestellte Druckregelgeräte mit einem Höchstreglerdruck bis einschließlich 200 mbar, und einem Durchfluss bis einschließlich 4 kg/h für Butan, Propan und deren Gemische sowie die dazugehörigen Sicherheitseinrichtungen

This European Standard was approved by CEN on 18 October 2000.

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 Management Centre or to any CEN member.

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.

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



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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Foreword

This document has been prepared by CEN /TC 181, "Dedicated liquefied petroleum gas appliances", the Secretariat of which is held by AFNOR

This document has to be implemented at national level, either by publication of an identical text or by endorsement, by February 2002, and conflicting national standards have to be withdrawn by February 2002.

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 document: Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This document only covers type testing.

Items relating to quality assurance systems, production testing and particularly certificates of conformity are not covered by this standard.

It is intended that this text will be the first part of a standard covering different applications of the equipment considered. At the time of issue of this document, two complementary documents are envisaged :

- prEN 13785 : regulators with a capacity not greater than 100 kg/h, having an outlet pressure of not greater than 4 bar, other than those which are the subject of EN 12864, and their associated safety devices for butane, propane or their mixtures ;
- prEN 13786 : automatic change-over devices with a capacity not greater than 100 kg/h, having an outlet pressure of not greater than 4 bar, and their associated safety devices for butane, propane or their mixtures.

WARNING NOTICE – At the date of publication of this standard, annexes G and H are the subject of an amendment.

1 Scope

This European standard defines the structural and operational characteristics, the safety requirements and test methods, the marking, of low-pressure, non adjustable regulators for butane, propane or their mixtures, referred to in the body of the text as "regulators".

This European Standard covers regulators supplied at vapour pressure by one or several portable cylinders. They are normally directly connected to the cylinder valve or the self closing valve.

The regulators covered by this standard are designed for a maximum outlet pressure of up to and including 200 mbar and a maximum rate of up to and including 4 kg/h.

This European Standard also applies to the safety devices which are supplied as part of the regulators. The characteristics of these devices are given in annex A and B.

The requirements of this European Standard apply generally to regulators used in locations where the temperature likely to be reached during use is between - 20 °C and + 50 °C, + 50 °C being the maximum temperature allowable for the cylinder. When the devices are subjected to temperatures below this range, they shall comply with special requirements defined in annex C.

Regulators designed for specific purposes (caravans and motor caravans) which are subjected to special requirements are dealt with in annex D.

This European standard does not include the installation rules for regulators and their possible associated safety devices. In this matter, reference should be made to national regulations in force in the member countries.

Regulators which are intended to be used with gases containing methylacetylene and propadiene are excluded from the scope of this European Standard.

This European standard only covers type testing.

WARNING NOTICE: The figures in annexes G and H show the types of connections used according to the country of use of the regulators

The top part of these figures (above the horizontal line) applies to the regulator and is normative.

The bottom part of these figures (below the horizontal line) applies to the tap (or the valve) to which the regulator is fitted. This is given as a guide for the tests and is not normative.

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 437:1993, *Test gases - Test pressures – Appliance categories*.

EN 549, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*.

EN 561:1994, *Gas welding equipment – Quick-action coupling with shut off valves for welding, cutting and allied processes*.

prEN 1763-1:1999, *Rubber and plastics tubing, hoses and assemblies for use with commercial propane, commercial butane and their mixtures in the vapour phase – Part 1 : Requirements for rubber and plastics tubing and hoses*.

EN ISO 3166-1, *Codes for the representation of names of countries and their subdivisions - Part 1: Country codes (ISO 3166-1:1997)*.

ISO 7-1, *Pipe threads where pressure-tight joints are made on the threads – Part 1 : Dimensions, tolerances and designation.*

ISO 75, *Plastics - Determination of temperature of deflection under load.*

ISO 178, *Plastics - Determination of flexural properties.*

ISO 180, *Plastics - Determination of IZOD impact strength.*

ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads – Part 1 : Dimensions, tolerances and designation.*

ISO 301, *Zinc alloy ingots intended for casting.*

ISO 426-1, *Wrought copper-zinc alloys - Chemical composition and forms of wrought products - Part 1 : Non-leaded and special copper-zinc alloys.*

ISO 426-2, *Wrought copper-zinc alloys - Chemical composition and forms of wrought products - Part 2 : Leaded copper-zinc alloys.*

ISO 527, *Plastics - Determination of tensile properties.*

ISO 565, *Test sieves – Metal wire cloth, perforated metal plate and electroformed sheet - Nominal sizes of openings.*

ISO 1210, *Plastics - Determination of the burning behaviour of horizontal and vertical specimens in contact with a small-flame ignition source.*

ISO 4892-3, *Plastics – Methods of exposure to laboratory light sources – Part 3: Fluorescent UV Lamps.*

ISO 9227, *Corrosion tests in artificial atmospheres - Salt spray tests.*

3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply :

3.1 General definitions

3.1.1

regulator

device which maintains an outlet pressure constant independent of the variations of the inlet pressure and/or flow rate and/or temperature within defined limits

3.1.2

quick coupling

connection system which allows the fitting of the regulator to the cylinder valve without a threaded connection and without using tools

3.1.3

tap

device for closing the gas flow which requires an intentional manual action (for example on a lever, a knob, etc.)

3.1.4

self closing valve

device allowing the automatic shut off of the gas flow by simple disconnection of the regulator

3.1.5

valve pad

component part of the regulation sub-assembly which ensures soundness between the part of the regulator at supply pressure and the part of the regulator at outlet pressure when this is equal to the lock-up pressure