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Rõhuregulaatorid ja nendega seotud ohutusseadmed gaasiseadmetele. Osa 1: Rõhuregulaatorid sisendrõhule kuni 500 mbar

Pressure regulators and associated safety devices for gas appliances - Part 1: Pressure regulators for inlet pressures up to and including 50 kPa

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 88-1:2011 sisaldb Euroopa standardi EN 88-1:2011 ingliskeelset teksti. Standard on kinnitatud Eesti Standardikeskuse 30.04.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas. Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kätesaadavaks tegemise kuupäev on 06.04.2011. Standard on kätesaadav Eesti standardiorganisatsionist.	This Estonian standard EVS-EN 88-1:2011 consists of the English text of the European standard EN 88-1:2011. This standard is ratified with the order of Estonian Centre for Standardisation dated 30.04.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation. Date of Availability of the European standard text 06.04.2011. The standard is available from Estonian standardisation organisation.
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ICS 23.060.40

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EUROPEAN STANDARD

EN 88-1

NORME EUROPÉENNE

EUROPÄISCHE NORM

April 2011

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Supersedes EN 12067-1:1998, EN 12078:1998, EN 88-1:2007

English Version

**Pressure regulators and associated safety devices for gas
appliances - Part 1: Pressure regulators for inlet pressures up to
and including 50 kPa**

Régulateurs de pression et dispositifs de sécurité associés
pour appareils à gaz - Partie 1: Régulateurs de pression
pour pression amont inférieure ou égale à 50 kPa

Druckregler und zugehörige Sicherheitseinrichtungen für
Gasgeräte - Teil 1: Druckregler für Eingangsdrücke bis
einschließlich 50 kPa

This European Standard was approved by CEN on 26 February 2011.

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Foreword

This document (EN 88-1:2011) has been prepared by Technical Committee CEN/TC 58 "Safety and control devices for burners and appliances burning gaseous or liquid fuels", 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 October 2011, and conflicting national standards shall be withdrawn at the latest by April 2014.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN 88-1:2007, EN 12067-1:1998 and EN 12078:1998.

This document 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.

This document is intended to be used in conjunction with EN 13611:2007. This document refers to clauses of EN 13611:2007 or adapts clauses by stating "with the following modification", "with the following addition", "is replaced by the following" or "is not applicable" in the corresponding clause. This European Standard adds clauses or sub-clauses to the structure of EN 13611:2007 which are particular to this European Standard. It should be noted that these clauses and sub-clauses are not indicated as an addition. Sub-clauses or annexes which are additional to those in EN 13611:2007 are numbered starting from 101 or are designated as Annex AA, BB, CC etc.

It should be noted that the following significant technical changes compared to the previous edition have been incorporated in this European Standard:

- a) alignment with EN 13611:2007;
- b) requirements and tests of Pneumatic gas/air ratio pressure regulators (EN 12067-1) and Zero pressure regulators (EN 12078) included in this European Standard;
- c) requirements and tests for breather holes changed;
- d) requirements and tests for housings changed;
- e) general requirement for leak tightness changed;
- f) requirement for rated flow rate changed;
- g) tests for class A and B regulators changed;
- h) declarations of nominal diameters and maximum inlet pressure extended.

EN 88 *Pressure regulators and associated safety devices for gas appliances* consists of the following parts:

- EN 88-1, *Pressure regulators and associated safety devices for gas appliances — Part 1: Pressure regulators for inlet pressures up to and including 50 kPa*;
- EN 88-2, *Pressure regulators and associated safety devices for gas appliances — Part 2: Pressure regulators for inlet pressures above 500 mbar up to and including 5 bar*.

Performance Level (PL) or Safety Integrity Level (SIL) classifications according to EN ISO 13849-1 or EN 61508-1 cannot automatically be claimed based upon compliance with this European Standard. Pressure regulators with PL or SIL classification do not automatically meet the requirements of this European 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, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

1 Scope

This European Standard specifies the safety, construction and performance requirements for pressure regulators and pneumatic gas/air ratio pressure regulators (zero pressure regulators are included as a special type of pneumatic gas/air ratio pressure regulator), intended for use with gas burners, gas appliances and similar use, hereafter referred to as 'pressure regulators'.

This European Standard is applicable to

- pressure regulators with declared maximum inlet pressures up to and including 50 kPa (500 mbar) of nominal connection sizes up to and including DN 250 for use with one or more fuel gases in accordance with EN 437,
- pressure regulators which use auxiliary energy,
- pneumatic gas/air ratio pressure regulators, which function by controlling a gas outlet pressure in response to an air signal pressure, air signal differential pressure, and/or to a furnace pressure signal (zero pressure regulators are included as a special type of pneumatic gas/air ratio pressure regulator),
- gas/air ratio pressure regulators which change an air outlet pressure in response to a gas signal pressure or a gas signal differential pressure.

This European Standard does not cover

- pressure regulators connected directly to gas distribution network or to a container that maintains a standard distribution pressure,
- pressure regulators intended for gas appliances to be installed in the open air and exposed to the environment,
- mechanically linked gas/air ratio controls,
- electronic gas/air ratio controls (EN 12067-2).

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 161:2011¹⁾, *Automatic shut-off valves for gas burners and gas appliances*

EN 13611:2007, *Safety and control devices for gas burners and gas burning appliances — General requirements*

EN 60529, *Degrees of protection provided by enclosures (IP code) (IEC 60529:1989)*

EN 60730-1:2000, *Automatic electrical controls for household and similar use — Part 1: General requirements (IEC 60730-1:1999, modified)*

EN 175301-803, *Detail Specification: Rectangular connectors — Flat contacts, 0,8 mm thickness, locking screw not detachable*

¹⁾ To be published.