# Ohutusseadmed kaitseks ülerõhu eest. Osa 4: Piloodi poolt juhitavad kaitseklapid

Safety devices for protection against excessive pressure - Part 4: Pilot operated safety valves John Colons of the Colons of t



## **EESTI STANDARDI EESSÕNA**

## **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN ISO 4126-4:2004 sisaldab Euroopa standardi EN ISO 4126-4:2004 ingliskeelset teksti.

Käesolev dokument on jõustatud 18.05.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonist.

This Estonian standard EVS-EN ISO 4126-4:2004 consists of the English text of the European standard EN ISO 4126-4:2004.

This document is endorsed on 18.05.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

#### Käsitlusala:

This European Standard specifies general requirements for pilot operated safety valves, other than those covered in Part 1, irrespective of the fluid for which they are designed. In all cases, the operation is carried out by the fluid in the system to be protected. It is applicable to pilot operated safety valves having a valve flow diameter of 6 mm and above which are for use at set pressures of 0,1 bar gauge and above. No limitation is placed on temperature. This is a product standard and it is not concerned with applications for pilot operated safety valves.

## Scope:

This European Standard specifies general requirements for pilot operated safety valves, other than those covered in Part 1, irrespective of the fluid for which they are designed. In all cases, the operation is carried out by the fluid in the system to be protected. It is applicable to pilot operated safety valves having a valve flow diameter of 6 mm and above which are for use at set pressures of 0,1 bar gauge and above. No limitation is placed on temperature. This is a product standard and it is not concerned with applications for pilot operated safety valves.

**ICS** 13.240

**Võtmesõnad:** performance tests, pneumatic tests, pressure, pressure control valves, pressure overload, pressure tests, safety device, safety devices, safety requirements, safety valves, specification, specification (approval), specifications, testing, tests, type testing, valves

## EN ISO 4126-4

## **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

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### **English version**

## devices for protection against excessive pressure

Part 4: Pilot-operated safety valves (ISO 4126-4: 2004)

Dispositifs de sécurité pour protection contre les pressions excessives -Partie 4: Soupapes de sûreté pilotées (ISO 4126-4: 2004)

Sicherheitseinrichtungen gegen unzulässigen Überdruck - Teil 4: Pilotgesteuerte Sicherheitsventile (ISO 4126-4: 2004)

This European Standard was approved by CEN on 2003-05-16.

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.

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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, the Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, the Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland, and CO OF THE the United Kingdom.

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

Management Centre: rue de Stassart 36, B-1050 Brussels

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### **Foreword**

This document (EN ISO 4126-4:2004) has been prepared by Technical Committee CEN/TC 69 "Industrial valves", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 185 "Safety devices for protection against excessive pressure".

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 August 2004, and conflicting national standards shall be withdrawn at the latest by August 2004.

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.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and the United Kingdom.

This standard for safety devices for protection against excessive pressure consists of seven parts of which this is Part 4. The various parts are:

- Part 1 : Safety valves
- Part 2 : Bursting disc safety devices
- Part 3: Safety valves and bursting disc safety devices in combination
- Part 4 : Pilot operated safety valves
- Part 5 : Controlled safety pressure relief systems (CSPRS)
- Part 6 : Application, selection and installation of bursting disc safety devices
- Part 7 : Common data

Part 7 contains data that is common to more than one of the parts of this standard to avoid unnecessary repetition.

Annex A is informative.

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EN ISO 4126-4: 2004

#### 1 Scope

This part of this European Standard specifies general requirements for pilot operated safety valves, other than those covered in Part 1, irrespective of the fluid for which they are designed. In all cases, the operation is carried out by the fluid in the system to be protected.

It is applicable to pilot operated safety valves having a valve flow diameter of 6 mm and above which are for use at set pressures of 0,1 bar gauge and above. No limitation is placed on temperature.

This is a product standard and it is not concerned with applications for pilot operated safety valves.

## 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 1092-1, Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories PN designated – Part 1: Steel flanges.

EN 1092-2, Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories PN designated – Part 2: Cast iron flanges.

EN 1092-3, Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories PN designated – Part 3: Copper alloy and composite flanges.

prEN 1759-1, Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, Class designated – Part 1: Steel flanges NPS1/2 to 24.

EN 12516-3, Valves - Shell design strength - Part 3: Experimental method.

EN 12627, Industrial Valves - Butt welding ends for steel valves.

EN 12760, Valves - Socket welding ends for steel valves.

EN ISO 6708, Pipework components - Definition and selection of DN (nominal size) (ISO 6708:1995).

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

ASME B1.20.1, NPT threads.

#### 3 Terms and definitions

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

#### 3.1

#### pilot operated safety valve

self actuated device comprising a valve and an attached pilot

NOTE The pilot responds to the pressure of the fluid without any other energy than the fluid itself and controls the operation of the valve. The valve opens when the fluid pressure that keeps it closed is removed or reduced. The valve re-closes when the pressure is re-applied.