Paiksed tulekustutussüsteemid. Gaasikustutussüsteemide komponendid. Osa 13: Nõuded ja katsemeetodid sisselaskeklappidele ja tagasilöögiklappidele

Fixed firefighting systems - Components for gas extinguishing systems - Part 13: Requirements and test methods for check valves and non-return valves

EESTI STANDARDI EESSÕNA **NATIONAL FOREWORD**

Käesolev Eesti standard EVS-EN 12094-13:2001 sisaldab Euroopa standardi EN 12094-13 + AC:2001 ingliskeelset teksti.	This Estonian standard EVS-EN 12094-13:2001 consists of the English text of the European standard EN 12094-13 + AC:2001.
Käesolev dokument on jõustatud 16.11.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.	This document is endorsed on 16.11.2001 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 specifies the requirements and describes test methods for check and non-return valves for CO2 inert gas or halocarbon gas fire extinguishing systems.This standard is applicable to check valves installed between container valve and manifold and non-return valves installed in pilot lines, except those valves which are tested in combination with non-electrical control devices. Non-return and check valves allow the passage in the direction of flow and they prevent flow in the reverse direction.	**Scope:** This European Standard specifies the requirements and describes test methods for check and non-return valves for CO2 inert gas or halocarbon gas fire extinguishing systems.This standard is applicable to check valves installed between container valve and manifold and non-return valves installed in pilot lines, except those valves which are tested in combination with non-electrical control devices. Non-return and check valves allow the passage in the direction of flow and they prevent flow in the reverse direction.

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Võtmesõnad: fire b, fire equipment, fire extinguishers, fire extinguishing apparatus, fire extinguishing equipment, fire fighting, fire safety, firefighting, firefighting equipment, flexible, specification (approval), specifications, stationary, test specimens, testing, valves

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Fixed firefighting systems - Components for gas extinguishing systems - Part 13: Requirements and test methods for check valves and non-return valves

Installations fixes de lutte contre l'incendie - Eléments d'installation d'extinction à gaz - Partie 13: Exigences et méthodes d'essai pour clapets anti-retour

Ortsfeste Brandbekämpfungsanlagen - Bauteile für Löschanlagen mit gasförmigen Löschmitteln - Teil 13: Anforderungen und Prüfverfahren für Rückflussverhinderer und Rückschlagventile

This European Standard was approved by CEN on 4 February 2001.

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.

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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting systems", 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 September 2001, and conflicting national standards shall be withdrawn at the latest by December 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.

This part of EN 12094 is one of a number of European Standards prepared by CEN/TC 191 covering components for gas extinguishing systems.

They are included in a series of European Standards planned to cover:

- gas extinguishing systems (EN 12094)
- sprinkler systems (EN 12259 and EN 12845)
- powder systems (EN 12416)
- explosion protection systems (EN 26184)
- foam systems (EN 13565)
- hose systems (EN 671)
- smoke and heat control systems (EN 12101)
- water spray systems

The following parts of this European Standard are planned:

- Part 1: Requirements and test methods for electrical automatic control and delay devices
- Part 2: Requirements and test methods for non-electrical automatic control and delay devices
- Part 3: Requirements and test methods for manual triggering and stop devices
- Part 4: Requirements and test methods for high- pressure container valve assemblies and actuators
- Part 5: Requirements and test methods for selector valves and actuators for CO_2 systems
- Part 6: Requirements and test methods for non-electrical disable devices for CO_2 systems
- Part 7: Requirements and test methods for nozzles for CO_2 systems
- Part 8: Requirements and test methods for flexible connectors for CO_2 systems
- Part 9: Requirements and test methods for special fire detectors
- Part 10: Requirements and test methods for pressure gauges and pressure switches
- Part 11: Requirements and test methods for weighing devices
- Part 12: Requirements and test methods for alarm devices
- Part 13: Requirements and test methods for check valves and non-return valves
- Part 16: Requirements and test methods for odorizing devices for low pressure CO_2 systems
- Part 17: Requirements and test methods for pipe hangers
- Part 20: Requirements and test methods for compatibility of components

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

Introduction

It has been assumed in the preparation of this European Standard that the execution of its provisions is entrusted to appropriately qualified and experienced people.

All pressure data in this European Standard are given as gauge pressures in bar, unless otherwise stated.

NOTE 1 bar = 10^5 N m^{-2} = 100 kPa.

1 Scope

This European Standard specifies the requirements and describes test methods for check and non-return valves for CO_2, inert gas or halocarbon gas fire extinguishing systems.

Non-return and check valves allow the passage in the direction of flow and they prevent flow in the reverse direction.

This European Standard is applicable to check valves installed between container valve and manifold and non-return valves installed in pilot lines, except those valves which are tested in combination with non-electrical control devices.

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 12094-8, *Fixed firefighting systems - Components for gas extinguishing systems - Requirements and test methods for flexible connectors for CO_2 systems*

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

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

3 Terms and definitions

For the purposes of this European Standard the terms and definitions of EN 12094-8 and the following terms and definitions apply:

3.1
check valve
component intended for installation between container valve and manifold, which permits flow only in one direction

3.2
CO_2-high-pressure installation
fire extinguishing installation in which the CO_2 is stored at ambient temperature, e.g. the pressure of the CO_2 in storage is p_{abs} = 58,6 bar at 21°C

3.3
CO_2-low-pressure installation
fire extinguishing installation in which the CO_2 is stored at low temperature, normally at a temperature of - 19°C to - 21°C

3.4
fill ratio
mass of extinguishing medium related to the net capacity of a container expressed as kilograms per litre (kg/l)

3.5
gas extinguishing installation
system installed to provide fire protection

3.6
halocarbon gas
extinguishing agent that contains as primary components one or more organic compounds containing one or more of the elements fluorine, chlorine, bromine or iodine

3.7
halocarbon gas installation
fire extinguishing installation in which the halocarbon gas is stored at ambient temperature