Plahvatuse kõrvalejuhtimise süsteem

Explosion diverters



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN 16020:2011
sisaldab Euroopa standardi EN 16020:2011
ingliskeelset teksti.

This Estonian standard EVS-EN 16020:2011 consists of the English text of the European standard EN 16020:2011.

Standard on kinnitatud Eesti Standardikeskuse 31.08.2011 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.

This standard is ratified with the order of Estonian Centre for Standardisation dated 31.08.2011 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.

Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 27.07.2011.

Date of Availability of the European standard text 27.07.2011.

Standard on kättesaadav Eesti standardiorganisatsioonist.

The standard is available from Estonian standardisation organisation.

ICS 13,230

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EUROPEAN STANDARD

EN 16020

NORME EUROPÉENNE EUROPÄISCHE NORM

July 2011

ICS 13.230

English Version

Explosion diverters

Dispositifs déviateurs d'explosion

Explosionsschlote

This European Standard was approved by CEN on 25 June 2011.

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Foreword

This document (EN 16020:2011) has been prepared by Technical Committee CEN/TC 305 "Potentially explosive atmospheres - Explosion prevention and protection", the secretariat of which is held by DIN.

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of an identical text or by endorsement, at the latest by January 2012, and conflicting national standards shall be withdrawn at the latest by January 2012.

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 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.

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1 Scope

An explosion diverter is used to divert explosions propagating through ducts, thus preventing flame jet ignition and pressure piling in connected protected enclosures. It will reduce the risk of flame transmission.

This European Standard describes the basic design of a pipe-in-pipe diverter and specifies the testing requirements and the application of explosion diverters.

This European Standard covers:

- a test method for assessing the efficacy of explosion diverters;
- design rules for a type of pipe-in-pipe diverter;
- demands to venting device on diverter;
- installation requirements;
- maintenance requirements;
- marking.

This European Standard considers dust/air explosive atmospheres only.

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 13237, Potentially explosive atmospheres — Terms and definitions for equipment and protective systems intended for use in potentially explosive atmospheres

EN 14034-1, Determination of explosion characteristics of dust clouds — Part 1: Determination of the maximum explosion pressure p_{max} of dust clouds

EN 14034-2, Determination of explosion characteristics of dust clouds — Part 2: Determination of the maximum rate of explosion pressure rise $(dp/dt)_{max}$ of dust clouds

EN 14460:2006, Explosion resistant equipment

EN 14491: Dust explosion venting protective systems

EN 14797, Explosion venting devices

EN 15089:2009, Explosion isolation systems

EN ISO/IEC 17025, General requirements for the competence of testing and calibration laboratories (ISO/IEC 17025:2005)

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 13237, EN 14797, EN 14491, EN 15089:2009 and the following apply.