SLOVENSKI STANDARD
SIST EN 12560-5:2002

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Prirobnice in prirobnični spoji - Tesnila za prirobnice z oznako Class - 5. del: Kovinska obročasta tesnila za jeklene prirobnice

Flanges and their joints - Gaskets for Class-designated flanes - Part 5: Metallic ring joint gaskets for use with steel flanges

Flansche und ihre Verbindungen - Dichtungen für Flansche mit Class-Bezeichnung - Teil 5: RTJ-Dichtungen aus Metall für Stahlflansche

Brides et leurs assemblages - Joints pour les brides désignées Class - Partie 5: Joints annulaires métalliques pour utilisation avec des brides en acier

Ta slovenski standard je istoveten z: **EN 12560-5:2001**

ICS:

23.040.60	Prirobnice, oglavki in spojni elementi	Flanges, couplings and joints
23.040.80	Tesnila za cevne zveze	Seals for pipe and hose assemblies

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EUROPEAN STANDARD

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English version

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This European Standard was approved by CEN on 28 December 2000.

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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.

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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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Contents

Foreword

This European Standard has been prepared by Technical Committee CEN/TC 74 "Flanges and their joints", 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of an identical text or by endorsement, at the latest by July 2001, and conflicting national standards shall be withdrawn at the latest by July 2001.

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.

The annex A is informative.

Introduction

EN 12560 consists of seven parts:

Part 1: Non-metallic flat gaskets with or without inserts

Part 2: Spiral wound gaskets for use with steel flanges

Part 3: Non-metallic PTFE envelope gaskets

Part 4: Corrugated, flat or grooved metallic and filled metallic gaskets for use with steel flanges

Part 5: Metallic ring-joint gaskets for use with steel flanges

Part 6: Kammprofile gaskets for use with steel flanges

Part 7: Covered metal jacketed gaskets for use with steel flanges

The terminology and definitions in this standard are in accordance with those given in ISO standards.

1 Scope

This European Standard specifies the dimensions and marking of metallic ring-joint gaskets for use in conjunction with specific flange facings (type J) of flanges complying with prEN 1759-1:2000 for Class 150, Class 300, Class 600, Class 900 and Class 1 500 for nominal sizes DN 15 to DN 600, and for Class designation 2 500 up to and including DN 300.

NOTE 1 Dimensions of other types of gaskets for use with flanges complying with prEN 1759-1:2000, prEN 1759-3:1994 and prEN 1759-4:1997 are given in prEN 12560-1:2000, prEN 12560-2:2000, prEN 12560-3:2000, prEN 12560-4:2000, prEN 12560-6:2000 and prEN 12560-7:2000.

NOTE 2 The materials for metallic ring-joint gaskets are outside the scope of this standard, but guidance on typical materials and their hardnesses is given in annex A.

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).

prEN 1759-1:2000
Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 1: Steel flanges, NPS 2 to NPS 24

EN ISO 4287
Geometrical product specification (GPS) - Surface texture : Profile method – Terms, definitions and surface texture parameters (ISO 4287:1997)

prEN 1759-3:1994
Flanges and their joints - Circular flanges for pipes, valves, fittings and accessories, Class designated - Part 3 : Copper alloy flanges

prEN 1759-4:1997
Flanges and their joints – Circular flanges for pipes, valves, fittings and accessories, Class designated – Part 4: Aluminium alloy

3 Terms and definitions

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

3.1
NPS
see prEN 1759-3:1994

3.2
Class
see prEN 1759-3:1994

4 Designations

4.1 Range of Class designations

Gaskets shall be designated as suitable for use with one or more of the following Class designations of flange:

— Class 150;

— Class 300;

— Class 600;

— Class 900;

— Class 1 500;

— Class 2 500.

4.2 Range of gasket sizes

Gasket nominal sizes shall be designated in accordance with Table 1.

4.3 Gasket types

Gasket types, as defined in clause 5 and illustrated in Figure 2, shall be designated as either "oval" or "octagonal".

4.4 Identification number

Each metallic ring-joint gasket is assigned an identification number, prefixed by "R", as shown in Table 1.

NOTE The nominal size(s) and Class designation(s) to which each identification number is relevant is given in Table 1.

4.5 Information to be supplied by the purchaser

The following information shall be supplied by the purchaser when ordering gaskets:

a) the number and Part of this European Standard, i.e. EN 12560-5;

b) whether a particular cross-sectional shape i.e. oval or octagonal, is required (see clause 5);

c) the identification ring number (see 4.4 and Table 1);

d) the material (see annex A);

Additional information that should be supplied by the purchaser :

e) the expected operating conditions for which the gasket will be used.

NOTE Before ordering a gasket it is recommended that the selection of the gasket type shall be made in consultation with the gasket supplier. The selection of gasket type should take account of the fluid, the operating conditions, the properties of the gasket materials, the type and surface finish of the flange facing and the flange bolt loading.

EXAMPLE A gasket according to EN 12560-5, oval type, with ring number R.36 in type X12Cr13 (Identification symbol S 410) shall be designated as follows :

Gasket EN 12560-5 — oval — R.36 — S410.

5 Gasket types

Metallic ring-joint gaskets for use with ring-joint (type J) flange facings complying with prEN 1759-1:2000 shall have a cross-sectional shape that is either oval or octagonal.

NOTE 1 Figure 1 a) shows a flange joint with an oval type gasket and Figure 1 b) with an octagonal type gasket.

NOTE 2 Figure 2 shows the design of oval type and octagonal type gaskets.

NOTE 3 Ring-joint gaskets of individual identification numbers are applicable to certain nominal size(s) and Class designation(s), as given in Table 1.

NOTE 4 If the purchaser requires a ring-joint gasket with a particular cross-sectional shape, i.e. either oval or octagonal, then this requirement should be stated in the enquiry and/or order (see 4.5). In the absence of this requirement being stated, the type will be at the discretion of the manufacturer.

NOTE 5 The selection of the gasket should take into account the fluid, the operating conditions, the properties of the gasket materials, the type and surface finish of the flange facing and the flange bolt loading. It is recommended that selection of gaskets for any particular application is made in consultation with the gasket supplier (see 4.5).