
**Prirobnice in prirobnični spoji - Tesnila za prirobnice z oznako Class - 1. del:
Nekovinska ravna tesnila z vložki ali brez njih**

Flanges and their joints - Gaskets for Class-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts

Flansche und ihre Verbindungen - Dichtungen für Flansche mit Class-Bezeichnung - Teil 1: Flachdichtungen aus nichtmetallischem Werkstoff mit oder ohne Einlagen

Brides et leurs assemblages - Joints pour les brides désignées Class - Partie 1: Joints plats non métalliques avec ou sans insert

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Ta slovenski standard je istoveten z: EN 12560-1:2001

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

SIST EN 12560-1:2002**en**

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 12560-1

January 2001

ICS 23.040.80

English version

Flanges and their joints - Gaskets for Class-designated flanges - Part 1: Non-metallic flat gaskets with or without inserts

Brides et leurs assemblages - Joints pour les brides
désignées Class - Partie 1: Joints plats non métalliques
avec ou sans insert

Flansche und ihre Verbindungen - Dichtungen für Flansche
mit Class-Bezeichnung - Teil 1: Flachdichtungen aus
nichtmetallischem Werkstoff mit oder ohne Einlagen

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

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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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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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 and contains "A-deviations".

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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.

WARNING Gaskets made to this standard may contain asbestos. Materials containing asbestos may be subject to legislation that requires precautions to be taken when handling them to ensure that they do not constitute a hazard to health (see annex A). Attention is drawn to the relevant EC directives.

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1 Scope

This European Standard specifies the dimensions, types, designation and marking of non-metallic flat gaskets, with or without insertion, for use with flanges in accordance with prEN 1759-1:2000, prEN 1759-3:1994 and prEN 1759-4:1994, for Class designations Class 150, Class 300, Class 600 and Class 900 for nominal sizes DN 15 to DN 600.

NOTE 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 12560-2:2000, prEN 12560-3:2000, prEN 12560-4:2000 and prEN 12560-5:2000, prEN 12560-6:2000 and prEN 12560-7:2000.

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, nominal pipe sizes NPS 1/2 to NPS 24.

prEN 1759-3:1994

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

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prEN 1759-4:1997

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

EN ISO 6708

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

3 Terms and definitions

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

3.1

DN

see EN ISO 6708

3.2

NPS

see prEN 1759-3:1994

3.3

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.

4.2 Range of gasket sizes

Gasket nominal sizes shall be designated in accordance with the ranges specified in Tables 1, 2 and 3.

4.3 Gasket types

Gasket types as defined in clause 6 and illustrated in Figures 1 and 2 shall be designated as:

- Type FF;
- Type IBC;
- Type TG;
- Type SR.

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4.4 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 12560-1;
- b) gasket type designation (see 4.3);
- c) nominal size (see Tables 2 or 3, as appropriate);
- d) Class designation (see Tables 2 or 3, as appropriate);
- e) thickness (see 8.1);
- f) material(s) (see clause 5);

Additional information that should be supplied by the purchaser:

- g) expected operating conditions for which the gasket will be used and whether the gasket is required for use with water intended for human consumption (see clause 5).

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

EXAMPLE A gasket according to EN 12560-1, full face type (type FF), of nominal size DN 100, Class 150, 2 mm thickness in expanded graphite, shall be designated as follows:

Gasket EN 12560-1 — FF — DN 100 — Class 150 — 2 mm — expanded graphite.

5 Gasket designs and materials

Gaskets shall be manufactured in a single material or combination of materials and shall be one of the following designs:

- a) single flat sheet; or
- b) laminated ply; or
- c) moulded.

NOTE 1 The selection of the gasket material should take into account the fluid, the operating conditions, the properties of the gasket material, 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 4.4).

Where gaskets come, or are likely to come, into contact with water intended for human consumption, the materials shall comply with relevant National regulations.

NOTE 2 The purchaser should indicate on the enquiry and/or order if gaskets are to be used with water intended for human consumption (see 4.4). It should be noted that the National regulations of both the country of origin and the country of use may be considered relevant.

6 Gasket types

Gaskets shall be one of the following types:

- a) Full face type gasket (designation: type FF) for use with type A (flat face) or type B (raised face) flange facings (see Figures 1 a) and 2 a));
- b) Inside bolt circle type gasket (designation: type IBC) for use with type A (flat face) or type B (raised face) flange facings (see Figures 1 b), 2 b), 2 c) and 2 d));
- c) Tongue and groove type gasket (designation: type TG) for use with type C/D (tongue/groove) flange facings (see Figures 1 c) and 2 b), 2 c) and 2 d));
- d) Spigot and recess type gasket (designation: type SR), for use with type E/F (spigot/recess) flange facings (see Figures 1 d); 2 b), 2 c) and 2 d));

NOTE 1 The types of flange facings are specified in prEN 1759-1:2000, prEN 1759-3:1994 and prEN 1759-4:1997 and for information, the facings are shown in Figure 3.

NOTE 2 The selection of gasket type should take into account the fluid, the operating conditions, the properties of the gasket material, the type and surface finish of the flange facing and the flange bolt loading. It is recommended that selection of gasket type for any particular application is made in consultation with the gasket supplier (see 4.4).