



SWEDISH  
STANDARDS  
INSTITUTE

# SVENSK STANDARD SS-EN 12560-1

Fastställt	Utgåva	Sida
2001-01-19	1	1 (1+17)

© Copyright SIS. Reproduction in any form without permission is prohibited.

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

The European Standard EN 12560-1:2001 has the status of a Swedish Standard. This document contains the official English version of EN 12560-1:2001.

Swedish Standards corresponding to documents referred to in this Standard are listed in "Catalogue of Swedish Standards", issued by SIS. The Catalogue lists, with reference number and year of Swedish approval, International and European Standards approved as Swedish Standards as well as other Swedish Standards.

## Rörflänsar – Packningar för klassbetecknade flänsar – Del 1: Icke-metalliska plana packningar med eller utan mellanlägg

Europastandarden EN 12560-1:2001 gäller som svensk standard. Detta dokument innehåller den officiella engelska versionen av EN 12560-1:2001.

Motsvarigheten och aktualiteten i svensk standard till de publikationer som omnämns i denna standard framgår av "Katalog över svensk standard", som ges ut av SIS. I katalogen redovisas internationella och europeiska standarder som fastställts som svenska standarder och övriga gällande svenska standarder.

ICS 23.040.80

Standarder kan beställas hos SIS Förlag AB som även lämnar allmänna upplysningar om svensk och utländsk standard.  
Postadress: SIS, Box 6455, 113 82 STOCKHOLM  
Telefon: 08 - 610 30 00. Telefax: 08 - 30 77 57  
E-post: sis.sales@sis.se. Internet: www.sisforlag.se

Upplysningar om **sakinnehållet** i standarden lämnas av SIS (SMS).  
Telefon: 08 - 459 56 00. Telefax: 08 - 667 85 42  
E-post: info@sms-standard.se

Tryckt i mars 2001



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.



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

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

**Contents**

	Page
<b>Foreword</b> .....	<b>3</b>
<b>Introduction</b> .....	<b>4</b>
<b>1 Scope</b> .....	<b>5</b>
<b>2 Normative references</b> .....	<b>5</b>
<b>3 Terms and definitions</b> .....	<b>5</b>
<b>3.1 DN</b> .....	<b>5</b>
<b>3.2 NPS</b> .....	<b>5</b>
<b>3.3 Class</b> .....	<b>5</b>
<b>4 Designations</b> .....	<b>6</b>
<b>4.1 Range of Class designations</b> .....	<b>6</b>
<b>4.2 Range of gasket sizes</b> .....	<b>6</b>
<b>4.3 Gasket types</b> .....	<b>6</b>
<b>4.4 Information to be supplied by the purchaser</b> .....	<b>6</b>
<b>5 Gasket designs and materials</b> .....	<b>7</b>
<b>6 Gasket types</b> .....	<b>7</b>
<b>7 Range of nominal sizes</b> .....	<b>11</b>
<b>8 Dimensions</b> .....	<b>11</b>
<b>8.1 Thickness</b> .....	<b>11</b>
<b>8.2 Diameters</b> .....	<b>12</b>
<b>8.3 Tolerances</b> .....	<b>14</b>
<b>9 Marking</b> .....	<b>14</b>
<b>Annex A (informative) A-deviations</b> .....	<b>15</b>

## 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".

## 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.

## 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 ½ 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.*

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.

### 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).