

**Äärikud ja nende ühendused. Torude
tsirkulaaräärikud, klapid, toruliitmikud
ja abidetailid. Klassifikaator. Osa 4:
Alumiiniumsulamäärikud äärikud**

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1759-4:2003 sisaldab Euroopa standardi EN 1759-4:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 14.10.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1759-4:2003 consists of the English text of the European standard EN 1759-4:2003.</p> <p>This document is endorsed on 14.10.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala:</p> <p>This standard specifies requirements for Class designated circular flanges for pipes, valves, fittings and accessories made from aluminium alloy in the range of DN 15 to DN 600 (NPS 1/2 to NPS 24) and Class 150 to Class 300 (see Table 1).</p>	<p>Scope:</p> <p>This standard specifies requirements for Class designated circular flanges for pipes, valves, fittings and accessories made from aluminium alloy in the range of DN 15 to DN 600 (NPS 1/2 to NPS 24) and Class 150 to Class 300 (see Table 1).</p>
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Võtmesõnad: flanges, marking, materials, measurement, pipe couplings, pipes, pipes : tubes, pressure, quality assurance, seals, seals : stoppers, specification (approval), specifications, temperature dependence, testing, tolerances, tolerances (measurement), valves

ICS 23.040.60

English version

**Flanges and their joint - Circular flanges for pipes, valves,
fittings and accessories, class designated - Part 4: Aluminium
alloy flanges**

Brides et leurs assemblages - Brides circulaires pour tubes,
appareils de robinetterie, raccords et accessoires,
désignées Class - Partie 4: Brides en alliages d'aluminium

Flansche und ihre Verbindungen - Runde Flansche für
Rohre, Armaturen, Formstücke und Zubehörteile, nach
Class bezeichnet - Teil 4: Flansche aus
Aluminiumlegierungen

This European Standard was approved by CEN on 10 July 2003.

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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland and United Kingdom.



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Contents

Page

Foreword.....	3
1 Scope	4
2 Normative references	4
3 Terms and definitions.....	4
4 Designations.....	5
4.1 Range of nominal sizes.....	5
4.2 Range of Class designations.....	5
4.3 Types of flanges.....	5
4.4 Designation of flanges	5
5 General requirements.....	6
5.1 Flange materials.....	6
5.2 Repairs.....	6
5.3 Bolting.....	6
5.4 Gaskets	6
5.5 Pressure/temperature (p/T) ratings.....	6
5.6 Dimensions.....	6
5.7 Flange facings	7
5.7.1 Types of jointing faces	7
5.7.2 Jointing face finish	7
5.8 Spot facing and back facing of flanges	7
5.9 Tolerances	7
5.10 Marking	7
Annex A (informative) Masses of flanges	14
Annex B (informative) Comparison of metric bolting to imperial bolting.....	15
Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 97/23/EC	16

Foreword

This document (EN 1759-4:2003) has been prepared by Technical Committee CEN/TC74 "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 March 2004, and conflicting national standards shall be withdrawn at the latest by March 2004.

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 the Pressure Equipment Directive (PED)¹.

For relationship with EU Directive(s), see informative annex ZA, which is an integral part of this standard.

EN 1759 consists of the following parts:

- Part 1: Steel flanges (draft stage);
- Part 3: Copper alloy flanges (draft stage);
- Part 4: Aluminium alloy flanges

The mating dimensions of the flanges of this standard are compatible with those flanges of other materials in accordance with the other parts of EN 1759 and with those flanges of ISO 7005.

Annexes A and B are informative.

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

¹) Directive 97/23 EC of the European Parliament and of the Council of 29 May 1997 on the approximation of the Laws of the Member States concerning pressure equipment; OIEC L 181.

1 Scope

This European standard specifies requirements for Class designated circular flanges for pipes, valves, fittings and accessories made from aluminium alloy in the range of DN 15 to DN 600 (NPS 1/2 to NPS 24) and Class 150 to Class 300 (see Table 1).

This standard specifies the types of flanges and their facings, dimensions and tolerances, bolt sizes, surface finish of jointing faces, marking and materials together with associated pressure temperature (p/T) ratings.

The flanges are intended to be used for piping as well as for pressure vessels.

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 1515-1, *Flanges and their joints — Bolting — Part 1: Selection of bolting*.

EN 12392, *Aluminium and aluminium alloys — Wrought products — Special requirements for products intended for the production of pressure equipment*.

EN 12560, *Flanges and their joints - Gaskets for Class-designated flanges (in different parts)*

EN ISO 4287:1998, *Geometrical product specification (GPS) — Surface texture: Profile method — Terms, definitions and surface texture parameters (ISO 4287:1997)*.

EN ISO 6708:1995, *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 6708:1995

3.2

NPS (Nominal pipe size)

An alphanumeric designation of size for components of a pipework system, which is used for reference purposes. It comprises, for the purpose of Class designated flanges according to this standard, the letters NPS followed by a dimensionless number which is indirectly related to the physical size of the bore or outside diameter of the end connections.

NOTE 1 The number following the letters NPS does not represent a measurable value and should not be used for calculation purposes except where specified in the relevant standard.

NOTE 2 The relationship between DN and NPS is given in the tables.

3.3

Class

An alphanumeric designation used for reference purposes related to a combination of mechanical and dimensional characteristics of a component of a pipework system. It comprises the word Class followed by a dimensionless whole number.