

# SVENSK STANDARD

## SS-EN 1124-2:2014

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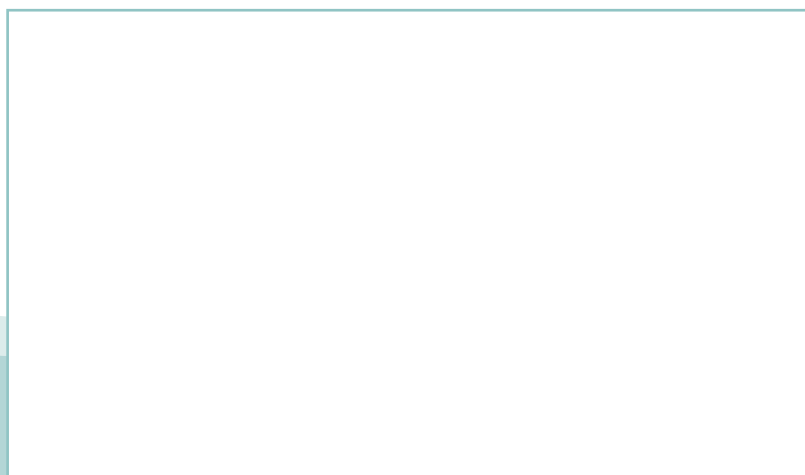
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### **Avlopp – Rör och rördelar av rostfritt stål, längssvetsat rör med insticksmuff –**

#### **Del 2: System S, former och dimensioner**

### **Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems –**

#### **Part 2: System S, forms and dimensions**



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Denna standard ersätter SS-EN 1124-2:2007, utgåva 2.

The European Standard EN 1124-2:2014 has the status of a Swedish Standard. This document contains the official version of EN 1124-2:2014.

This standard supersedes the Swedish Standard SS-EN 1124-2:2007, edition 2.

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EUROPEAN STANDARD

EN 1124-2

NORME EUROPÉENNE

EUROPÄISCHE NORM

June 2014

ICS 23.040.10; 23.040.40

Supersedes EN 1124-2:2007

English Version

Pipes and fittings of longitudinally welded stainless steel pipes  
with spigot and socket for waste water systems - Part 2: System  
S, forms and dimensions

Tubes et raccords de tube soudés longitudinalement en  
acier inoxydable, à manchon enfichable pour réseaux  
d'assainissement - Partie 2: Système S, formes et  
dimensions

Rohre und Formstücke aus längsnahtgeschweißtem,  
nichtrostendem Stahlrohr mit Steckmuffe für  
Abwasserleitungen - Teil 2: System S, Formen und Maße

This European Standard was approved by CEN on 17 April 2014.

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 CEN-CENELEC 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 CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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

**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

| <b>Contents</b>   | <b>Page</b> |
|---|-------------|
| Foreword.....   | 3           |
| Introduction .....  | 4           |
| 1 Scope .....   | 5           |
| 2 Normative references .....  | 5           |
| 3 Terms and definitions .....   | 5           |
| 4 Symbols .....   | 5           |
| 5 Dimensions.....   | 5           |
| 5.1 General and tolerances .....  | 5           |
| 5.2 Sockets .....   | 6           |
| 5.3 Pipes – Shape B 1 .....   | 7           |
| 5.4 Bends .....   | 8           |
| 5.4.1 Bends – Shape C 1 and C 2 .....   | 8           |
| 5.4.2 Bend with stilling section – Shape C 3.....                               | 10          |
| 5.5 Branches.....   | 11          |
| 5.5.1 Single branch – Shape D 1 and reducing single branch – Shape D 11.....    | 11          |
| 5.5.2 Double branch – Shape D 2 and reducing double branch – Shape D 21 .....   | 14          |
| 5.5.3 Angular branch – Shape D 3 and reducing angular branch – Shape D 31 ..... | 16          |
| 5.6 Transition pipe – Shapes F 1 and F 2 .....                                  | 18          |
| 5.7 Double socket – Shape F 4 .....   | 20          |
| 5.8 Insertion coupling with long socket – Shape F 5 .....                       | 21          |
| 5.9 Sliding ring-seal coupling – Shape F 41.....                                | 22          |
| 5.10 Trap – Shapes G 1 and G 2 .....  | 23          |
| 5.11 Access pipes .....   | 25          |
| 5.11.1 Access pipe – Shape H 1 .....  | 25          |
| 5.11.2 Rear access branch – Shape H 5 .....                                     | 26          |
| 5.12 Other fittings .....   | 26          |
| 6 Socket plugs.....   | 27          |
| 6.1 Socket plug shape K 10 .....  | 27          |
| 6.2 Socket plug shape K 11 .....  | 28          |
| 7 Ratstop — Shape R.....  | 29          |
| 8 WC adapter — Shape T .....  | 30          |

## Foreword

This document (EN 1124-2:2014) has been prepared by Technical Committee CEN/TC 165 “Waste water engineering”, 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 December 2014, and conflicting national standards shall be withdrawn at the latest by December 2014.

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 supersedes EN 1124-2:2007.

In relation to the previous version of the standard, the following main modifications have been made:

- a) due to the newest marked developments and new installation methods, several components of system S have been adjusted to these conditions (introduction of new products);
- b) dimensional requirements have been extended and specified for compatibility with gravity drainage systems for buildings.

EN 1124, *Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems*, consists of the following parts:

- *Part 1: Requirements, testing, quality control;*
- *Part 2: System S, forms and dimensions;*
- *Part 3: System X – Dimensions;*
- *Part 4: Components for vacuum drainage systems and drainage systems on ships.*

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Introduction

Pipes and fittings of longitudinally welded, stainless steel pipes with spigot and socket for waste water systems as specified in this part of EN 1124 and EN 1124-3 are used in gravity drainage systems in buildings. For vacuum drainage systems and drainage systems on ships, it was necessary to specify additional requirements and further dimensional specifications for components and joints used in these systems. Components specified in EN 1124-4 are used for vacuum drainage systems and for drainage systems in shipbuilding.



## 1 Scope

This European Standard applies to pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems and specifies dimensions and tolerances for pipes, fittings and pipe connectors and establishes a system of designations for the different pipe and fitting types that conform to the stated requirements.

This part of EN 1124 is only valid in connection with EN 1124-1.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1124-1:1999, *Pipes and fittings of longitudinally welded stainless steel pipes with spigot and socket for waste water systems - Part 1: Requirements, testing, quality control*

EN ISO 228-1, *Pipe threads where pressure-tight joints are not made on the threads - Part 1: Dimensions, tolerances and designation (ISO 228-1)*

## 3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1124-1:1999 apply.

## 4 Symbols

|          |  |
|----------|--|
| DN/OD    | Nominal size with regard to the outside diameter |
| $d$      | Diameter   |
| $t$      | Socket construction depths                       |
| $s$      | Wall thickness                                   |
| $L$      | Effective length                                 |
| $l$      | Construction lengths                             |
| $r$      | Radius   |
| $\alpha$ | Angle  |
| $e$      | Off-set dimension (shift)                        |
| $t_5$    | Least insertion depth                            |
| $o$      | Ovality  |

## 5 Dimensions

### 5.1 General and tolerances

The figures in this document are simplified drawings. The dimensions given shall be followed.

Where no tolerances are given in this European Standard, tolerances for linear dimensions shall be followed in accordance with Table 1, tolerances for radii shall be followed in accordance with Table 2 and tolerances for angular dimensions, referring to the smaller side length, shall be followed in accordance with Table 3.

Table 1 — Tolerances for linear dimensions

Dimensions in millimetres

| Dimensional range | Tolerances for linear dimensions |
|-------------------|----------------------------------|
| 0 to 300          | ±5                               |
| > 300             | ±8                               |

Table 2 — Tolerances for radii

Dimensions in millimetres

| Dimensional range | Tolerances for radii |
|-------------------|----------------------|
| > 26 to 181       | ±3                   |
| > 181 to 378      | ±4                   |
| > 378 to 457      | ±5                   |

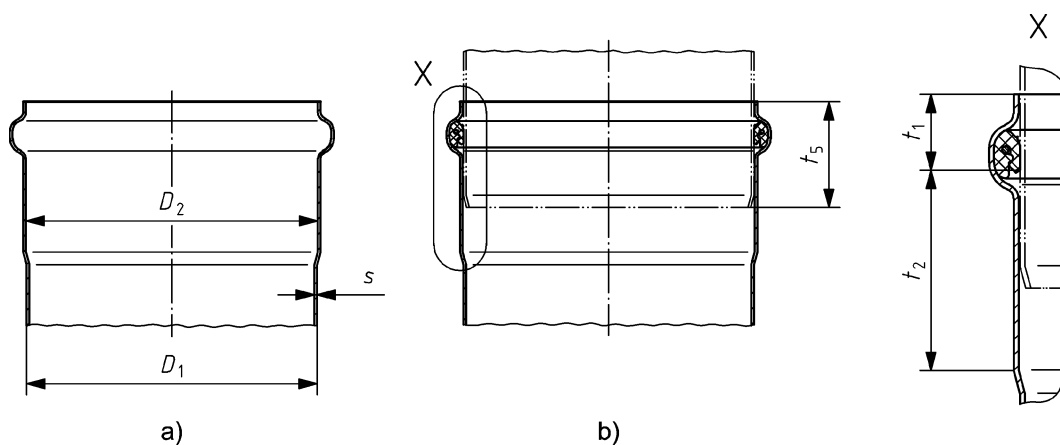
Table 3 — Tolerances for angles

| Side length (referring to the smaller side)<br>mm | Tolerances for angles<br>degrees |
|---|----------------------------------|
| > 10 to 120                                       | ±3                               |
| > 120 to 400                                      | ±4                               |
| > 400   | ±5                               |

5.2 Sockets

The socket dimensions in accordance with Figure 1 shall conform to Table 4.

Details not specified shall be chosen appropriately.



Key

- a standard socket
- b socket joint
- X effective sealing point

Figure 1 — Socket types

Table 4 — Dimensions and tolerances for sockets

Dimensions in millimetres

| Nominal size<br>DN/OD | Dimensions and tolerances |                  |             |                     |              |              |         |
|-----------------------|---------------------------|------------------|-------------|---------------------|--------------|--------------|---------|
|                       | $D_1$                     | $D_2$            | $o$         | $s$                 | $t_1$<br>max | $t_2$<br>max | $t_5^a$ |
| 40                    | $40^{+0,2}_0$             | $40,7^{+0,5}_0$  | < 2 % of DN | $1,00 \pm 0,2$      | 18           | 18           | 30      |
| 50                    | $50^{+0,2}_0$             | $50,5^{+0,6}_0$  |             |                     |              | 20           |         |
| 75                    | $75^{+0,3}_0$             | $75,6^{+0,6}_0$  |             |                     | 20           | 25           | 35      |
| 82                    | $82,4^{+0,3}_0$           | $83,2^{+0,4}_0$  |             |                     |              | 30           |         |
| 90                    | $90^{+0,3}_0$             | $90,8^{+0,5}_0$  |             |                     | 24           | 30           | 40      |
| 110                   | $110^{+0,3}_0$            | $110,6^{+0,7}_0$ |             |                     | 26           | 32           |         |
| 125                   | $125^{+0,3}_0$            | $125,8^{+0,6}_0$ |             | 35                  |              | 45           |         |
| 160                   | $160^{+0,4}_0$            | $160,7^{+0,8}_0$ |             | $1,25 \pm 0,2$      | 32           | 42           | 50      |
| 200                   | $200^{+0,4}_0$            | $200,8^{+0,8}_0$ |             | $1,50 \pm 0,3$      | 40           | 50           | 55      |
| 250                   | $250^{+0,5}_0$            | $251,0^{+0,8}_0$ |             | $1,50^{+0,8}_{0,3}$ | 45           | 55           | 65      |
| 315                   | $315^{+0,6}_0$            | $316,2^{+0,8}_0$ |             | $1,50^{+0,8}_{0,3}$ |              | 62           |         |

<sup>a</sup> Installation instructions only (necessary least insertion depth for tightness of pipe connection).

5.3 Pipes – Shape B 1

The effective length of pipes shall conform to Table 5.

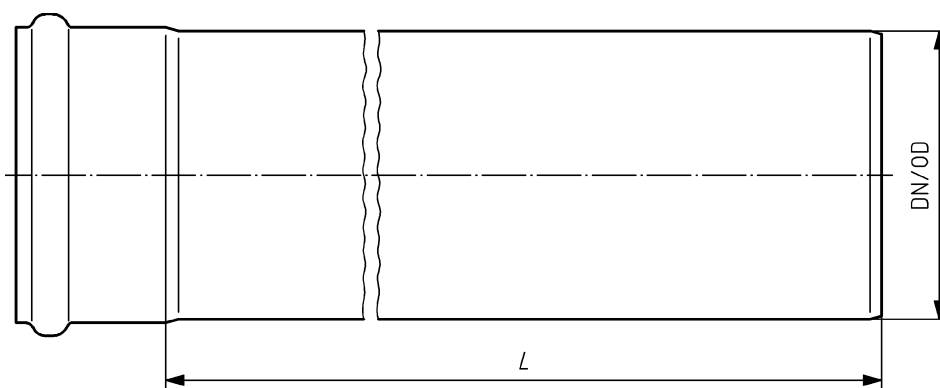


Figure 2 — Shape B 1

Designation of a drainage steel pipe (B 1) of nominal size DN/OD 110 with an effective length  $L = 1\ 000$  mm:

Pipe EN 1124-2 — B 1 – 110 – 1000