



# SLOVENSKI STANDARD

## SIST EN 16865:2016

01-december-2016

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### Plovila za celinske vode - Povezave in cevni priključki za dobavo pitne vode

Inland navigation vessels - Connections and assembled hoses for the transfer of potable water

Fahrzeuge der Binnenschifffahrt - Anschlüsse und Schlauchleitungen für das Bunkern von Trinkwasser

Bateaux de navigation intérieure - Raccords et tuyaux flexibles pour le ravitaillement en eau

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#### **ICS:**

47.020.30	Sistemi cevi	Piping systems
47.060	Jezerska in rečna plovila	Inland navigation vessels

**SIST EN 16865:2016**

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EUROPEAN STANDARD

EN 16865

NORME EUROPÉENNE

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ICS 47.020.30; 47.060

English Version

## Inland navigation vessels - Connections and assembled hoses for the transfer of potable water

Bateaux de navigation intérieure - Raccords et tuyaux flexibles pour le ravitaillement en eau potable

Fahrzeuge der Binnenschifffahrt - Anschlüsse und Schlauchleitungen für das Bunkern von Trinkwasser

This European Standard was approved by CEN on 12 June 2016.

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

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

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EN 16865:2016 (E)

## European foreword

This document (EN 16865:2016) has been prepared by Technical Committee CEN/TC 15, "Inland navigation vessels", 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of an identical text or by endorsement, by April 2017 at the latest, and any conflicting national standards shall be withdrawn by April 2017 at the latest.

It should be noted that some elements of this document may be subject to patent rights. CEN [and/or CENELEC] shall not be responsible for identifying any or all such patent rights.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

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## Introduction

This European standard has been developed to specify hygienically perfect, standard pipelines and connections for the transfer and receipt of potable water on the supply side (bunker boats, onshore plant or similar) and the consumer side (inland navigation vessel).

The connection consists of a pipe, a rapid coupling device both on the supply and consumer side with appropriate dummy couplings. This will allow simple handling and secure transfer of potable water. Using this standard will prevent unsuitable pipes being used on the supply side and dirt getting into the potable water bunker on the consumer side by using pipes without couplings in openings that are level with the deck. Dirt, micro-organisms and insects are prevented from penetrating by using dummy couplings on both sides.

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## 1 Scope

This European standard specifies the design, dimensions and technical requirements for connections and pipelines for storing potable water for inland navigation vessels.

These are:

- a fixed connection on the supply side;
- pipeline;
- a fixed connection on the consumer side;
- a connection for retrofitting inland navigation vessels that have a closure device level with the deck (internal pipe thread pursuant to EN ISO 228-1), consisting of a connecting part with a threaded connection and fixed coupling.

Necessary measures to prevent electrostatic charge and overfilling are not governed by the standard.

National regulations apply to drinking water supply plants. The requirements of this European standard supplement these regulations.

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## 2 Normative references

The following documents cited in whole or in part in this document are required for the application of this document. For dated references, only the edition referred to applies. For undated references, the latest version of the document referred to applies (including all amendments).

DIN 14302, *PN 16 aluminium alloy C pressure coupling*

DIN 14307-1, *PN 16 aluminium alloy C fixed coupling with sealing ring for pressure operation*

DIN 14311, *PN 16 aluminium alloy C dummy coupling for pressure and suction operation*

EN 10220, *Seamless and welded steel tubes – Dimensions and masses per unit length*

EN 22768-1, *General Tolerances — Part 1: Tolerances for linear and angular dimensions without records of individual tolerances (ISO 2768-1:1989)*

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

EN ISO 9093-1, *Small craft – Seacocks and through-hull fittings – Part 1: Metallic parts (ISO 9093-1)*

ISO 14726, *Ships and marine technology — Identification colours for the content of piping systems*

## 3 Terms and definitions

The following terms apply to the application of this document.



**3.1****potable water**

Water for human consumption as specified in Council Directive 98/83/EG (see [8])

[SOURCE: EN 13443-2:2005+A1:2007, 3.12]

**3.2****pipeline**

Pipe with a pipe connection on both sides or with a pipe connection on one side and a fixed connection on the other side

**3.3****pipe connector**

Pipeline fitting consisting of a pipe clamp, a pipe coupling and a dummy coupling

**3.4****fixed connection**

A permanently installed fitting consisting of a threaded pipe connection, fixed coupling and dummy coupling

**4 Technical requirements****4.1 General information**

General tolerances: ISO 2768—c

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The requirements relate to the design, dimensions and configuration of the connections.

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**4.2 Components** <https://standards.iteh.ai/catalog/standards/sist/67f1cfc8-b48a-4765-b441-4b15448bc9ed/sist-en-16865-2016>

**4.2.1 General information**

The position of the connection and the dimensions and specifications as set out under Paragraph 4 - Paragraph 7 shall be observed for the connection.

On the supply side, there are the following versions:

- Fixed connection to connect a pipeline;
- Permanently connected pipeline.

On the consumer side there are the following versions:

- Fixed connection;
- Retrofitting connection.

The overviews in Figure 1 and Figure 2 provide examples of connections for storing potable water.