



SLOVENSKI STANDARD

SIST EN 12827:2000

01-december-2000

Inland navigation vessels - Connections for the transfer of diesel oil

Inland navigation vessels - Connections for the transfer of diesel oil

Fahrzeuge der Binnenschifffahrt - Anschlüsse für die Übernahme von Dieselmotorkraftstoff

Bateaux de navigation intérieure - Raccords de ravitaillement en carburant Diesel

Ta slovenski standard je istoveten z: EN 12827:1999

[SIST EN 12827:2000](https://standards.iteh.ai/catalog/standards/sist/49fb7b0c-e79f-46cb-bd1a-2aab8cf0974f/sist-en-12827-2000)

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ICS:

47.020.30	Sistemi cevi	Piping systems
47.060	Razporeditev in povezava cevi	Inland navigation vessels

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EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 12827

June 1999

ICS 47.020.30; 47.060

English version

Inland navigation vessels - Connections for the transfer of diesel
oil

Bateaux de navigation intérieure - Raccords de
ravitaillement en carburant Diesel

Fahrzeuge der Binnenschifffahrt - Anschlüsse für die
Übernahme von Dieselmotorkraftstoff

This European Standard was approved by CEN on 26 April 1999.

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 Central Secretariat 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 Central Secretariat 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 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, at the latest by December 1999, and conflicting national standards shall be withdrawn at the latest by December 1999.

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.



Introduction

This European Standard has been developed to specify uniform connections for the transfer of diesel oil. The connection consists of a quick-release coupling ensuring an easy and safe fitting and a safe transfer of diesel oil. The connection for the transfer of diesel oil on inland navigation vessels is generally designed for pressure from outside the vessel.

1 Scope

This European Standard specifies the design, dimensions, technical requirements and testing of connections for the transfer of diesel oil on inland navigation vessels.

It does not apply to the filling of cargo tanks.

The Standard specifies:

- a connection of a design that is common on inland navigation vessels consisting of a threaded pipe and a quick release coupling;
- a connection for vessels with deck screw caps (internal thread according to ISO 228-1) consisting of an adaptor with threaded pipe and a quick release coupling.

The standard does not cover the necessary measures for the prevention of electrostatic charging and overfilling.

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.

EN 586-2

Aluminium and aluminium alloys – Forgings – Part 2: Mechanical properties and additional property requirements

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ENV 10220 : 1993

Seamless and welded steel tubes – Dimensions and masses per unit length

prEN 10241 : 1994

Threaded steel fittings

EN 12420 : 1999

Copper and copper alloys - Forgings

EN 22768-1

General tolerances – Part 1: Tolerances for linear and angular dimensions without individual tolerance indication

ISO 7-1

Pipe threads where pressure-tight joints are made on the threads – Part 1: Dimensions, tolerances and designation

ISO 228-1

Pipe threads where pressure-tight joints are not made on the threads – Part 1: Designation, dimensions and tolerances

ISO 14726-1

Ships and marine technology – Identification colours for the contents of piping systems – Part 1: Main colours and media (in preparation)

ISO 14726-2

Ships and marine technology – Piping systems - Colours for the content – Part 2: Additional colours for the miscellaneous substances (in preparation)

DIN 28450-2 : 1996

Couplings for tank trucks, nominal pressure 10, nominal size 50, 80 and 100 – Part 2: Male coupling

DIN 28450-3 : 1996

Couplings for tank trucks, nominal pressure 10, nominal size 50, 80 and 100 – Part 3: Female coupling

DIN 28450-4 : 1996

Couplings for tank trucks, nominal pressure 10, nominal size 50, 80 and 100 – Part 4: Female dust coupling

3 Definitions

For the purpose of this standard, the following definition applies:

3.1 Diesel oil: Inflammable liquids having an ignition point of $> 55^{\circ}\text{C}$.

4 Technical requirements

4.1 General

Dimensions in millimetres

General tolerances: EN 22768 - c

Requirements are related to design, dimensions and arrangement of connections.

4.2 Design

The position of the connection, the dimensions and specifications of clauses 4 to 8 shall be maintained.

Figure 1 shows the connection from the filling pipe fixed in the vessel to the quick release coupling at the filling hose (type 1).

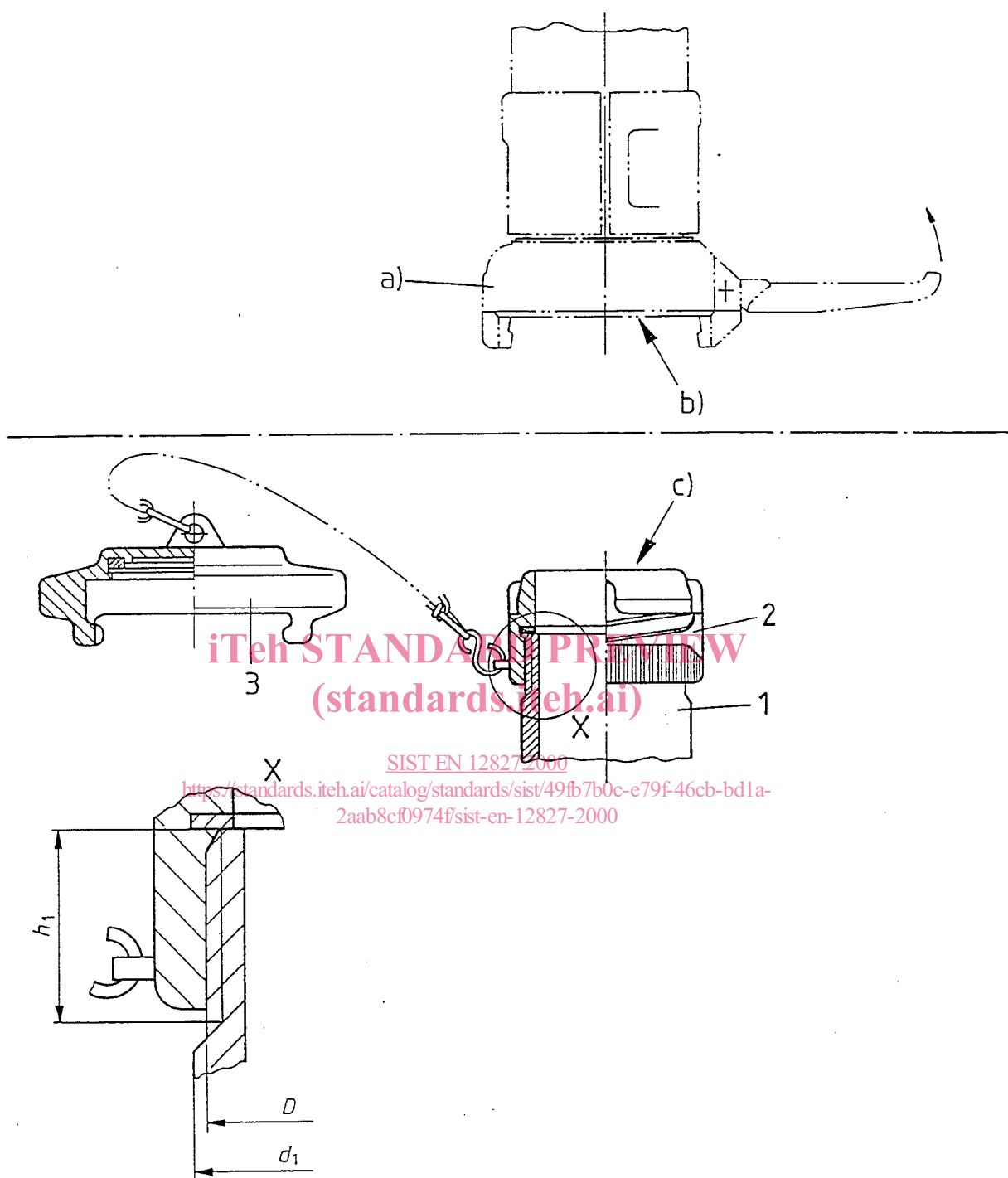
Figures 2 and 3 show the connection from each deck screw cap with adaptor (type 2) to the quick release coupling at the filling hose, where figure 2 shows the adaptor (type 2) with a nominal size conforming to clause 4.3 for pipe threads ISO 228-G2A and figure 3 shows the adaptor (type 2) with reduction for pipe threads at the deck screw cap deviating from the quick release coupling conforming to clause 4.3.

Table 1 specifies the dimensions for threaded pipe connections of nominal size conforming to clause 4.3 for Pos. No 1 and 2 in figures 1 to 3.

Table 2 specifies the position of figures 1 to 3 for DN 50 as an example.

Table 3 specifies the dimensions of the lower part of the adaptor.

Dimensions in millimetres



- a) Single lever coupling according to DIN 28450-3
- b) Supplying side
- c) Receiving side/Vessel

Figure 1: Quick release coupling connection type 1

Table 1: Dimensions for threaded pipe connections (Pos. 1, 2 and 5)

DN	Threaded pipe complying with ISO 228-1 D	d_f	h_f + 0,5 0
50	ISO 228-G2A	60,3	20
80	ISO 228-G3A	88,9	24
100	ISO 228-G4A	114,3	25

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The drawing illustrates a mechanical component with the following details:

- Top View (a):** Shows a rectangular base with a central slot and a small protrusion on the right side.
- Side View (b):** Shows the component's profile with a central vertical slot and a horizontal flange at the top.
- Sectional View (c):** A detailed cross-section showing internal features like a keyway (2), a pin (4), and a hook (3). Dimensions include a total height of 100, a horizontal distance of 150, a pin diameter of $\phi 15$, a thickness of 6, and vertical distances h_1 and h_2 . Horizontal dimensions D , d_1 , and d_2 are also indicated.
- Detail X:** A magnified view of a corner with a surface finish requirement of $Rz 25$.

- a) Single lever coupling according to DIN 28450-3
- b) Supplying side
- c) Receiving side/Vessel

Figure 2: Quick release coupling type 2 (adaptor) for deck screw cap 2" with nominal size 50 as an example