

# Inland navigation vessels — Connections for the discharge of waste water

ICS 47.020.30; 47.060

## Committees responsible for this British Standard

The preparation of this British Standard was entrusted to Technical Committee SME/32, Steering Committee on shipbuilding and marine standards, upon which the following bodies were represented:

British Marine Equipment Council  
British Maritime Technology  
British Waterways Board  
Chamber of Shipping  
Lloyd's Register of Shipping  
Marine Safety Agency  
Ministry of Defence  
Shipbuilders' and Shiprepairers' Association

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## National foreword

This British Standard has been prepared by Technical Committee SME/32 and is the English language version of EN 1306 : 1996, *Inland navigation vessels — Connections for the discharge of waste water*, published by the European Committee for Standardization (CEN).

EN 1306 : 1996 was produced as a result of international discussions in which the United Kingdom took an active part.

### Cross-references

The British Standards corresponding to the European Standards referred to in the text are identical in number and title with those given in clause 2, with the exception of EURONORM 156 for which no corresponding British Standards exist.

Publication referred to	Corresponding British Standard
ISO 228-1 : 1994	BS 2779 : 1986 <i>Specification for pipe threads for tubes and fittings where pressure-tight joints are not made on the threads (metric dimensions)</i>
ISO 2768-1 : 1989	BS EN 22768-1 : 1993 <i>Tolerances for linear and angular dimensions without individual tolerance indications</i>

**Compliance with a British Standard does not of itself confer immunity from legal obligations.**

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ICS 47.020.30; 47.060

Descriptors: Inland navigation, ships, boats, pipe fittings, water removal, sewage, threaded fittings, pipe adaptors, dimensions, tests, marking

English version

## Inland navigation vessels — Connections for the discharge of waste water

Bateaux de navigation intérieure —  
Raccords d'évacuation d'eaux usées

Fahrzeuge der Binnenschifffahrt —  
Anschlüsse für die Abgabe von Abwasser

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**CEN**

European Committee for Standardization  
Comité Européen de Normalisation  
Europäisches Komitee für Normung

**Central Secretariat: rue de Stassart 36, B-1050 Brussels**

## **Foreword**

This European Standard has been drawn up by the 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 July 1996, and conflicting national standards shall be withdrawn at the latest by July 1996.

According to the CEN/CENELEC Internal Regulations, the following countries are bound to implement this European Standard: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This European Standard was drawn up in compliance with ISO 7608 and national standards as well as national and international regulations like those of MARPOL.

In ISO 7608, a flange for discharge connections referring to MARPOL is standardized.

NOTE. MARPOL (Maritime Pollution Convention) International Convention for Prevention of Pollution from Ships from 1973 and the Protocol from 1978 relating to Intervention.

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## Introduction

This European Standard has been developed to specify uniform connections for the discharge of waste water.

The connection consists of a quick-release coupling ensuring an easy and safe fitting and a safe discharge of waste water. By limiting the use of this coupling to waste water, a confusion with connections for other liquids will be avoided.

This connection for the discharge of waste water in inland navigation vessels is designed for suction or pressure.

## 1 Scope

This European Standard specifies design, dimensions, technical requirements and testing of connections for the discharge of waste water from inland navigation vessels.

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 flange ISO 7608-B1 consisting of an adaptor with a matching flange with welded threaded pipe and quick release coupling.

## 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.

ENV 10220	<i>Seamless and welded steel tubes — Dimensions and masses per unit length</i>
EN 24018	<i>Hexagon head screws — Product grade C (ISO 4018 : 1988)</i>
EN 24034	<i>Hexagon nuts — Product grade C (ISO 4034 : 1986)</i>
EURONORM 156	<i>Shipbuilding steels — Standard and higher tensile grades</i>
ISO 228-1	<i>Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation</i>

ISO 2768-1	<i>General tolerances — Part 1: Tolerances for linear and angular dimensions without individual tolerance indications</i>
ISO 7608 : 1985	<i>Shipbuilding — Inland navigation — Couplings for disposal of oily mixture and sewage water</i>
DIN 28450-2 : 1989	<i>PN 10 couplings for road and rail tankers, in sizes DN 50, DN 80 and DN 100 — Male couplings (type VK)</i>
DIN 28450-3 : 1989	<i>PN 10 couplings for road and rail tankers, in sizes DN 50, DN 80 and DN 100 — Female couplings (type MK)</i>
DIN 28450-4 : 1989	<i>PN 10 couplings for road and rail tankers, in sizes DN 50, DN 80 and DN 100 — Female dust couplings (type MB)</i>

## 3 Definition

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

### waste water

Dirty water from kitchens, dining-rooms, washing-rooms (showers, washing basins), washhouses and faecal waste water.

## 4 Technical requirements

### 4.1 General

Dimensions in millimetres.

General tolerances: ISO 2768 – c.

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

### 4.2 Design

The position of the connection, dimensions and specifications shall be maintained.

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

Figure 2 shows the connection from the flange ISO 7608-B1 to the quick release coupling at the suction hose (F).

Figure 3 shows the adaptor consisting of flange and threaded connection.

Table 1 specifies the positions of figures 1 to 3.

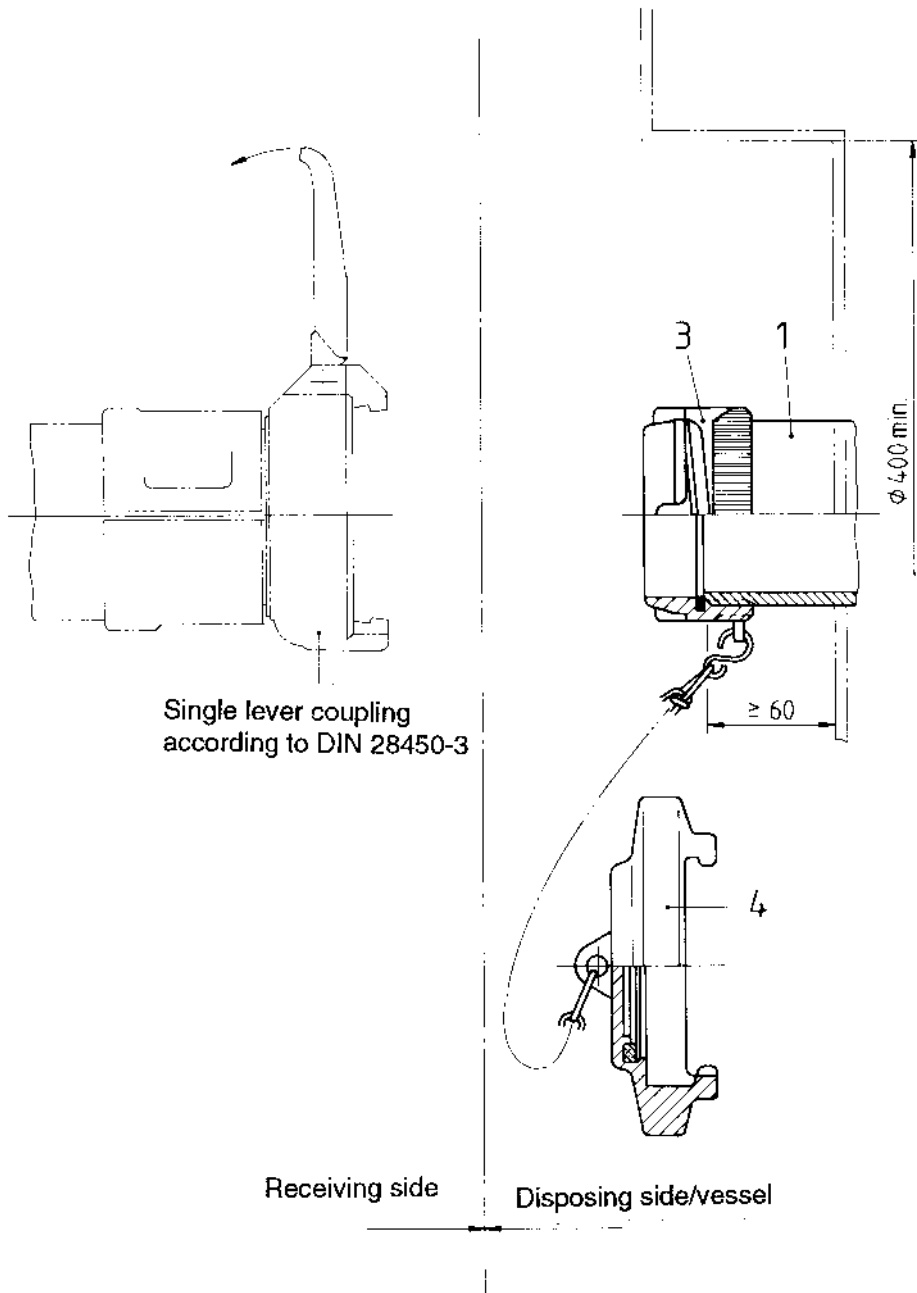
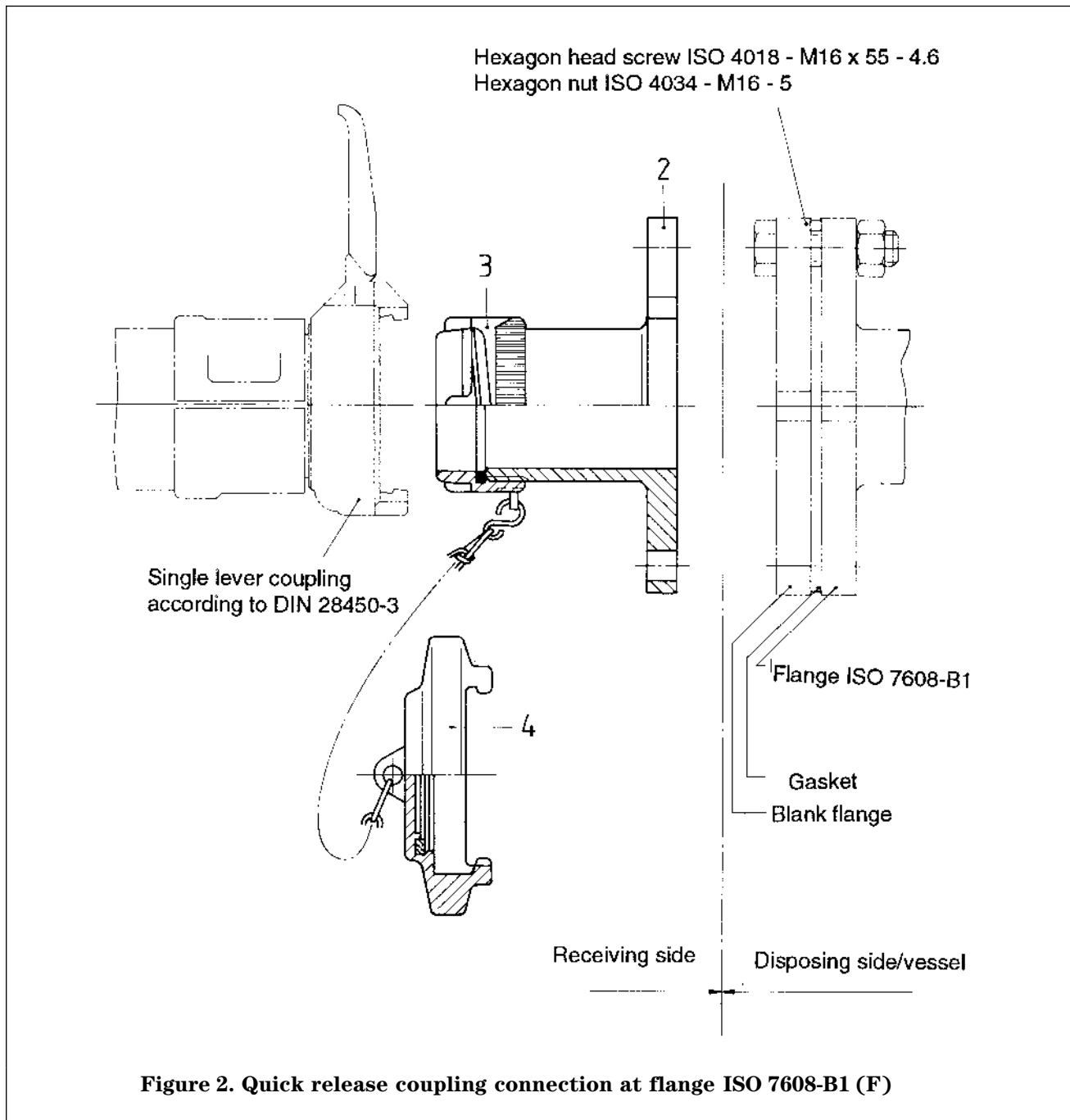


Figure 1. Quick release coupling connection (R)





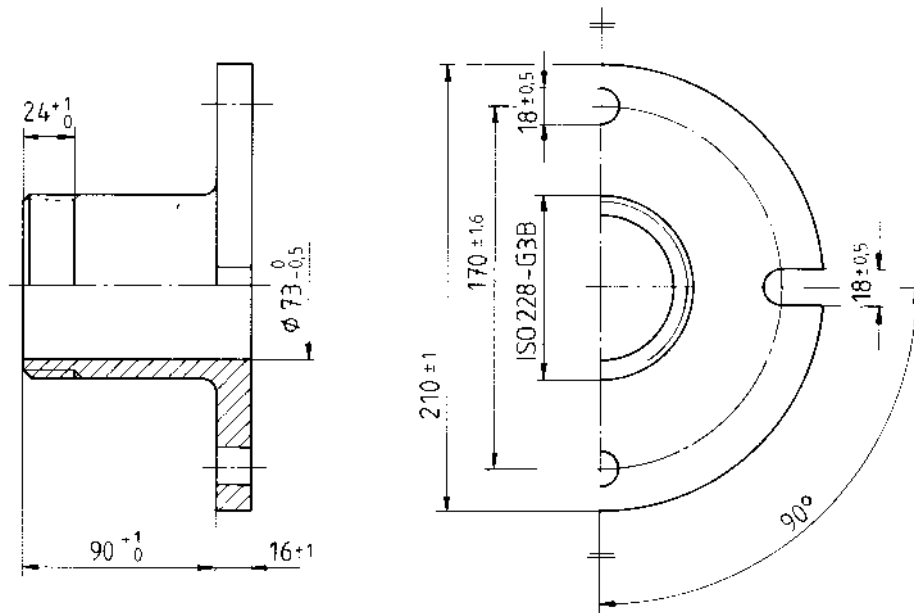


Figure 3. Adaptor, Position 2

Table 1. List of positions for figures 1 to 3

Position No.	Description	Disposing/receiving side	Note
1	Pipe with threaded connection	Disposing side	See figure 3
2	Adaptor	Receiving side	See figure 3
3	Coupling connection DN 80 with gasket	Figure 1: disposing side Figure 2: receiving side	As in DIN 28 450-2
4	Closing cap with chain and S-hook	Figure 1: disposing side Figure 2: receiving side	As in DIN 28 450-4

#### 4.3 Dimensions

The nominal size DN of the quick release coupling is 80 mm.

#### 4.4 Arrangement of connections

4.4.1 There shall be easy access to the coupling, and the arrangement shall allow easy connection taking into account the bending radius of the hose which should be taken as approximately 2000 mm.

4.4.2 For the manipulation of the quick release coupling, there shall be a minimum radial clearance of 200 mm around and at least 60 mm behind the connection, see figure 1.

4.4.3 The connection shall be installed in a protected position so that no damage can occur in normal use and that it does not unduly obstruct an adjacent walkway.

## 5 Material

### 5.1 General

Material not specified shall be left at the manufacturer's discretion.

### 5.2 Threaded pipe connection and adaptor

Pipe work complying with ENV 10220 and adaptor made of steel according to EURONORM 156 or equivalent material.

### 5.3 Coupling connection

Copper-zinc-alloy (brass) CuZn39Pb3 F37 or CuZn40Pb2 F37.

### 5.4 Closing cap

Aluminium-wrought alloy AlMgSi1 F31.

## 6 Testing

Testing by visual examination and measurement.

## 7 Designation

A complete connection of type R according to figure 1 and consisting of threaded pipe connection, coupling connection with gasket and closing cap with chain shall be designated:

Connection EN 1306 – R.

## 8 Marking

The connection as shown in figure 1 or figure 2 shall be durably marked:

- a) by painting of the pipe socket, colour: black and
- b) by a label

<p><b>Discharge connection for waste water</b> <b>[EN 1306]</b></p>
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Characters engraved or printed, fitted adjacent to the connection.

Minimum height of characters 7 mm.



## List of references

See national foreword.

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