# Inland navigation vessels — Connection nozzle for equipment and devices at cargo tanks — Dimensions

The European Standard EN 14714:2005 has the status of a British Standard

 $ICS\ 47.020.85;\ 47.060$ 



### National foreword

This British Standard is the official English language version of EN 14714:2005.

The UK participation in its preparation was entrusted by Technical Committee SME/32, Ships and marine technology, to Subcommittee SME/32/7, Inland navigation vessels, which has the responsibility to:

- aid enquirers to understand the text;
- present to the responsible international/European committee any enquiries on the interpretation, or proposals for change, and keep the UK interests informed;
- monitor related international and European developments and promulgate them in the UK.

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### Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 7 and a back cover.

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## EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN 14714

April 2005

ICS 47.020.85: 47.060

### English version

# Inland navigation vessels - Connection nozzle for equipment and devices at cargo tanks - Dimensions

Bateaux de navigation intérieure - Raccord pour l'installation du prélèvement des échantillons sur navireciterne - Dimensions Fahrzeuge der Binnenschifffahrt - Anschlussstutzen für Geräte und Einrichtungen an Ladetanks - Maße

This European Standard was approved by CEN on 14 February 2005.

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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

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### **Foreword**

This document (EN 14714:2005) 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of an identical text or by endorsement, at the latest by October 2005, and conflicting national standards shall be withdrawn at the latest by October 2005

This document addresses the requirement of the ADNR/ADN (European Convention for the Transportation of Dangerous Goods on the Rhine/European Convention for the Transportation of Dangerous Goods on Waterways) with regard to the connection possibilities of an enclosed/partially enclosed sampling device. The connection nozzle may be used both for quality and quantity control of the liquid goods transported and for visual examination of empty cargo tanks.

This standardized interface is intended to facilitate the measures required for inspection and service..

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

### 1 Scope

This document specifies requirements for the connection nozzle for equipment and devices at cargo tanks of tankers used in inland navigation and describes the interface of this equipment and these devices with the cargo tank

### 2 Normative references

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

EN 1092-1, Flanges and their joints — Circular flanges for pipes, valves, fittings and accessories, PN designated — Part 1: Steel flanges

prEN 1983, Industrial valves — Steel ball valves

EN 14420-6, Hose fittings with clamp units — Part 6: TW tank truck couplings

EN ISO 228-1:2003, Pipe threads where pressure-tight joints are not made on the threads — Part 1: Dimensions, tolerances and designation (ISO 228-1:2000).

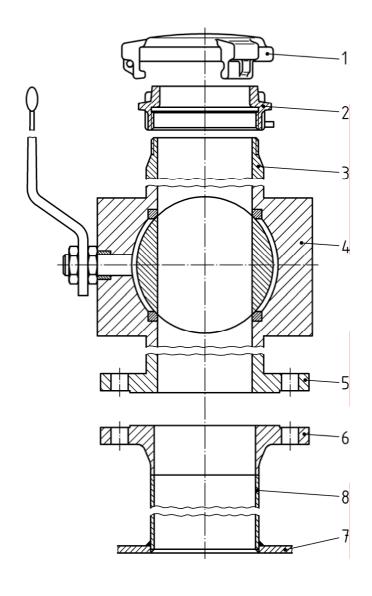
ISO 4200, Plain end steel tubes, welded and seamless — General tables of dimensions and masses per unit length

### 3 Dimensions, assembly

The shipside connection nozzle shall be either of

- type A (pipe socket and flange) as shown in Figure 1 or
- type B (flange connected directly to the tank) as shown in Figure 2

The equipment-side connection shall have a coupling as shown in Figure 3.

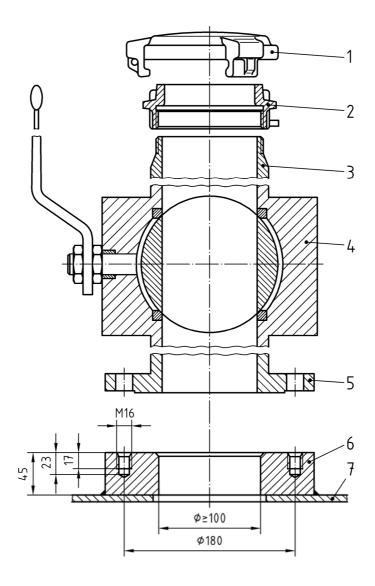


### Key

- 1 Dust cap (type MB) DN 100 PN 10 according to EN 14420-6
- 2 Male coupling (type VK) DN 100 PN 10 according to EN 14420-6 with pipe thread EN ISO 228:2003 G4
- 3 Pipe thread EN ISO 228:2003 G4A
- 4 Shutoff valve DN 100, PN 16, effective diameter 98 mm e.g. ball valve according to prEN 1983
- 5 Connecting flange DN 100, PN 16 fitting 6
- 6 Weld-neck flange DN 100, PN 16 according to EN 1092-1
- 7 Tank shell
- 8 Pipe 114,3 × 3,6 according to ISO 4200

NOTE For materials, see Clause 4

Figure 1 — Shipside connection nozzle, type A

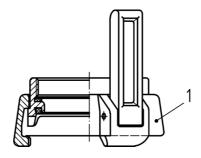


### Key

- 1 Dust cap (type MB) DN 100 PN 10 according to EN 14420-6
- 2 Male coupling (type VK) DN 100 PN 10 according to EN 14420-6 with pipe thread EN ISO 228:2003 G4
- 3 Pipe thread EN ISO 228:2003 G4A
- 4 Shutoff valve DN 100, PN 16, effective diameter 98 mm e.g. ball valve according to prEN 1983
- 5 Connecting flange DN 100, PN 16 fitting 6
- 6 Weld-on flange DN 100, PN 16, number of bolt holes 8
- 7 Tank shell

NOTE For materials, see Clause 4

Figure 2 — Shipside connection nozzle, type B



### Key

1 Female coupling (type MK) DN 100, PN 10 according to EN 14420-6

Figure 3 — Equipment-side connection

### 4 Materials

The manufacturer shall prepare accurate material data for the individual parts of the connections that may come into contact with the product

### 5 Designation

Example of the designation of a shipside connection nozzle (S) according to EN 14714 as shown in Figure 1 consisting of connecting flange, shutoff valve, male coupling, MB dust cap, weld-neck flange and pipe (type A):

### Shipside connection nozzle EN 14714 — S — A

Example of the designation of an equipment-side connection nozzle (G) according to EN 14714 as shown in Figure 3:

### Equipment-side connection EN 14714 — G

### 6 Marking

The connections shall be marked permanently and legibly with the following elements of the designation specified in Clause 5:

- EN 14714 number;
- type of connection (S or G);
- in addition, the shipside connection nozzle with the type (A or B).

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