

# SVENSK STANDARD

## SS-EN 13082:2008+A1:2012



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### **Behållare för transport av farligt gods – Utrustning för behållare – Ventil för gasåterföring**

### **Tanks for transport of dangerous goods – Service equipment for tanks – Vapour transfer valve**

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Denna standard ersätter SS-EN 13082:2008, utgåva 2.

The European Standard EN 13082:2008+A1:2012 has the status of a Swedish Standard. This document contains the official version of EN 13082:2008+A1:2012.

This standard supersedes the Swedish Standard SS-EN 13082:2008, edition 2.

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EUROPEAN STANDARD

**EN 13082:2008+A1**

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2012

ICS 13.300; 23.020.20; 23.060.20

Supersedes EN 13082:2008

English Version

## Tanks for transport of dangerous goods - Service equipment for tanks - Vapour transfer valve

Citernes de transport de matières dangereuses -  
Équipement de service pour citernes - Évent de transfert  
des vapeurs récupérées

Tanks für die Beförderung gefährlicher Güter -  
Bedienungsausrüstung von Tanks - Gaspindelventil

This European Standard was approved by CEN on 13 September 2008 and includes Amendment 1 approved by CEN on 24 December 2011.

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.

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## Foreword

This document (EN 13082:2008+A1:2012) has been prepared by Technical Committee CEN/TC 296 "Tanks for transport of dangerous goods", the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.

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 A1 EN 13082:2008 A1.

This document includes Amendment 1 approved by CEN on 2011-12-24.

The start and finish of text introduced or altered by amendment is indicated in the text by tags A1 A1.

This European Standard has been submitted for reference into the RID and/or in the technical annexes of the ADR [2]. A1 *deleted text* A1

This European Standard forms part of a coherent standards programme comprising the following standards,, under the general title "Tanks for transport of dangerous goods - Service equipment for tanks":

EN 13081, *Vapour collection adaptor and coupler*

EN 13082, *Vapour transfer valve*

EN 13083, *Adaptor for bottom loading and unloading*

EN 13308, *Non-pressure balanced footvalve*

EN 13314, *Fill hole cover*

EN 13315, *Gravity discharge coupler*

EN 13316, *Pressure balanced footvalve*

EN 13317, *Manhole cover assembly*

EN 13922, *Overfill prevention systems for liquid fuels*

EN 14595, *Pressure and Vacuum Breather Vent*

EN 14596, *Emergency pressure relief valve*

EN 15208, *Sealed parcel delivery systems – Working principles and interface specifications*


The standards programme also includes the following Technical Report:

CEN/TR 15120, *Guidance and recommendations for loading, transport and unloading.*

A1 Compared to EN 13082:2008 the following changes have been made:

- a) in the Foreword, the second sentence of the fifth paragraph has been deleted;

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- b) in Clause 4, it has been added that the vapour transfer valve shall be provided with a means to indicate that it is open. 

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, 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**

The vapour transfer valve is part of the vapour collection system that is required to comply with the European Directive 94/63/EC on Volatile Organic Compounds (VOC) [1].

The vapour transfer valve, subject of this European Standard, governs the transfer of vapour between the vehicle compartment, the gantry equipment and the service-station tank storage during loading and unloading operations.

## SS-EN 13082:2008+A1:2012 (E)

### 1 Scope

This European Standard covers the vapour transfer valve, used for the transfer of vapour between the tank compartment and the pipework connecting to the vapour collection adaptor.

This European Standard specifies the performance requirements and the critical dimensions of the vapour transfer valve. It also specifies the tests necessary to verify the compliance of the equipment with this European Standard. The equipment specified by this standard is suitable for use with liquid petroleum products and other dangerous substances of Class 3 of ADR [2] which have a vapour pressure not exceeding 110 kPa at 50 °C and petrol, and which have no sub-classification as toxic or corrosive.

### 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 12266-1:2003, *Industrial valves — Testing of valves — Part 1: Pressure tests, test procedures and acceptance criteria — Mandatory requirements*

EN 12266-2:2002, *Industrial valves — Testing of valves — Part 2: Tests, test procedures and acceptance criteria — Supplementary requirements*

ISO 2859-1, *Sampling procedures for inspection by attributes — Part 1: Sampling schemes indexed by acceptance quality limit (AQL) for lot-by-lot inspection*

### 3 Terms and definitions

For the purposes of this European Standard, the following terms and definitions apply.

#### 3.1

##### **vapour collection manifold**

volume into which each vapour transfer valve from each compartment is connected and which connects to the vapour collection adaptor

#### 3.2

##### **Maximum Working Pressure (MWP) (gauge pressure)**

maximum pressure to which the equipment is designed to operate, being the highest of the following three pressures:

- a) highest effective pressure allowed in the tank during filling (maximum filling pressure allowed)
- b) highest effective pressure allowed in the tank during discharge (maximum discharge pressure allowed)
- c) effective gauge pressure to which the tank is subjected by its contents (including such extraneous gases as it may contain) at the maximum working temperature

#### 3.3

##### **sequential function**

ability to provide a 'valve open' signal

## 4 Functions

The vapour transfer valve shall:

- when opened, allow the transfer of vapour between the tank compartment and the vapour collection manifold;

Ⓐ

- be provided with a means to indicate that it is open; Ⓐ
- when closed, ensure the confinement of the transported vapour and/or liquid in any orientation.

When open, the vapour transfer valve may prevent the transfer of liquid between tank compartments via the vapour collection manifold.

## 5 Design characteristics

### 5.1 General

If the vapour transfer valve incorporates other functionalities, such as the pressure and vacuum breather vent, they shall not jeopardize or modify the requirements of this European Standard.

### 5.2 Performance characteristics

The manufacturer shall provide the pressure drop curve at the following conditions:

- flow rate up to 300 standard m<sup>3</sup>/h of air at 20 °C (300 standard m<sup>3</sup>/h of air corresponds to the bottom loading of the compartment at 150 m<sup>3</sup>/h flow of substances).

### 5.3 Temperature range

Unless otherwise specified, the design temperature range shall be – 20 °C to + 50 °C.

Where the vapour transfer valve is subjected to more severe conditions, the design temperature range shall be extended to – 40 °C or + 70 °C as applicable.

### 5.4 Actuation

The vapour transfer valve may be operated by remote means.

The vapour transfer valve may have a sequential function.

In case of failure of the operating devices, the valve shall return automatically to its closed position.

### 5.5 Materials of construction

The manufacturer shall provide with the equipment a full material specification for those parts that may come into contact with the substances described by Clause 1.