



National Standards Authority of Ireland

IRISH STANDARD

**I.S. EN 13483:2005**

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75.200

**RUBBER AND PLASTIC HOSES AND HOSE  
ASSEMBLIES WITH INTERNAL VAPOUR  
RECOVERY FOR MEASURED FUEL  
DISPENSING SYSTEMS - SPECIFICATION**

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English version

**Rubber and plastic hoses and hose assemblies with internal  
vapour recovery for measured fuel dispensing systems -  
Specification**

Tuyaux et flexibles à récupération interne de vapeur pour  
un système de livraison mesurée carburant - Spécification

Gummi- und Kunststoffschläuche und -schlauchleitungen  
mit innenliegender Gasrückführung für Zapfsäulen an  
Tankstellen - Anforderungen

This European Standard was approved by CEN on 21 March 2005.

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## Foreword

This document (EN 13483:2005) has been prepared by Technical Committee CEN/TC 218 "Rubber and plastics hoses and hose assemblies", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by November 2005, and conflicting national standards shall be withdrawn at the latest by November 2005.

**WARNING** — Persons using this document should be familiar with normal laboratory practice. This document does not purport to address all of the safety problems, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any national regulatory conditions.

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 United Kingdom.

## 1 Scope

This document specifies the requirements for hose assemblies with vapour recovery for delivery systems on petrol filling stations.

The hose assemblies with vapour recovery for delivery systems on petrol filling stations shall be capable of withstanding anticipated mechanical, thermal and chemical stressing and shall be resistant to the combustible liquids used in these applications as well as their vapour and vapour air mixtures. The assemblies shall be constructed in such a way that actions during normal operation cannot give rise to dangerous electrostatic charges nor shall there be any reduction in the performance of the vapour recovery.

The assemblies are intended for use at ambient temperatures between  $-30\text{ °C}$  and  $+55\text{ °C}$  for normal temperature class and  $-40\text{ °C}$  and  $+55\text{ °C}$  for low temperature class at a working pressure  $\leq 16\text{ bar}^1$ . Hoses may be constructed from rubber or thermoplastic elastomer (TPE) and this document specifies the requirements for three types of hoses in two categories and two classes of hose assemblies for measured fuel dispensing systems, including oxygenated fuels ( $\leq 15\%$  oxygenated compounds) with internal vapour recovery tubing or hose.

NOTE This document does not apply to multi chamber fuel dispensing hoses.

## 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 26801, *Rubber or plastics hoses — Determination of volumetric expansion (ISO 6801:1983)*.

EN 27326, *Rubber and plastics hoses — Assessment of ozone resistance under static conditions (ISO 7326:1991)*.

EN 28033, *Rubber and plastics hose — Determination of adhesion between components (ISO 8033:1991)*.

EN ISO 1307, *Rubber and plastics hoses for general-purpose industrial applications — Bore diameters and tolerances, and tolerances on length (ISO 1307:1992)*.

EN ISO 1402, *Rubber and plastics hoses and hose assemblies — Hydrostatic testing (ISO 1402:1994)*.

EN ISO 4671, *Rubber and plastics hose and hose assemblies — Methods of measurements of dimensions (ISO 4671:1999)*.

EN ISO 8031, *Rubber and plastics hoses and hose assemblies — Determination of electrical resistance (ISO 8031:1993)*.

EN ISO 8330:2000, *Rubber and plastics hoses and hose assemblies — Vocabulary (ISO 8330:1998)*.

ISO 37, *Rubber, vulcanized or thermoplastic — Determination of tensile stress-strain properties*.

ISO 188, *Rubber, vulcanized or thermoplastic — Accelerated ageing and heat-resistance tests*.

ISO 554, *Standard atmospheres for conditioning and/or testing — Specifications*.

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1) 1 bar = 0,1 MPa

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