BRITISH STANDARD

BS EN
15333-1:2008
Incorporating corrigendum June 2008

Respiratory equipment — Open-circuit umbilical supplied compressed gas diving apparatus —

Part 1: Demand apparatus

ICS 13.340.30

BSI
British Standards

National foreword

This British Standard is the UK implementation of EN 15333-1:2008.

The UK participation in its preparation was entrusted by Technical Committee PH/4, Respiratory protection, to Subcommittee PH/4/7, Underwater breathing apparatus.

A list of organizations represented on this committee can be obtained on request to its secretary.

BSI, as a member of CEN, is obliged to publish EN 15333-1:2008 as a British Standard. However, attention is drawn to the fact that during the development of this European Standard, the UK committee voted against its approval as a European Standard. The reason for this disapproval is as follows: The scope of EN 15333-1:2008 states that "... it applies to …a maximum depth of 60 m for apparatus using oxygen, oxygen and helium or oxygen, nitrogen and helium gas mixtures". Further, the function testing required in the standard at subclause **6.13.4.**c) states that "…two dives are to be conducted by each diver of which at least one dive to be completed at the maximum depth for each relevant gas mixture under controlled conditions". The UK Diving at Work Regulations 1997 limit surface-supplied diving to a maximum depth of 50 metres; thus UK law does not permit equipment with a maximum depth greater than 50 m to be tested to this standard. As a result, it is the view of BSI Committee PH/4/7 that the mandatory requirement to conduct practical performance tests (dives) to the maximum depth of each relevant gas is unnecessary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 30 June 2008

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EUROPEAN STANDARD

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EUROPÄISCHE NORM

EN 15333-1

January 2008

ICS 11.040.10

English Version

Respiratory equipment - Open-circuit umbilical supplied compressed gas diving apparatus - Part 1: Demand apparatus

Equipements respiratoires - Appareil de plongée en narguilé à gaz comprimé et à circuit ouvert - Partie 1: Appareil à la demande

Atemgeräte - Schlauchversorgte Leichttauchgeräte mit Druckgas - Teil 1: Lungenautomatisch gesteuerte Geräte

This European Standard was approved by CEN on 3 November 2007.

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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 CEN Management Centre has the same status as the official versions.

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Foreword

This document (EN 15333-1:2008) has been prepared by Technical Committee CEN/TC 79 “Respiratory protective devices”, 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 2008, and conflicting national standards shall be withdrawn at the latest by July 2008.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EU Directive(s). For relationship with EU Directive(s), see informative Annex ZA, which is an integral part of this document.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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, 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 and the United Kingdom.

Introduction

A given open-circuit umbilical supplied compressed gas diving apparatus can only be approved when the apparatus or apparatus sub-assemblies satisfy the requirements of the tests specified in this European Standard, and practical performance tests have been carried out successfully on complete apparatus where specified in this European Standard.

The production of this European Standard has identified varying methods of surface supply and has separated them into two parts; equipment that supplies demand type facepieces and equipment that supplies free flow type facepieces.

1 Scope

This European Standard specifies minimum requirements for demand surface supplied and demand surface oriented diving apparatus to ensure a minimum level of safe operation of the apparatus. It applies to the following:

— depths between 0 m and 50 m for apparatus using air, oxygen or oxygen in nitrogen mixtures;

— depths between 0 m and 60 m for apparatus using oxygen, oxygen and helium or oxygen, nitrogen and helium gas mixtures;

— water temperatures between 4 °C and 34 °C or outside these temperatures as specified by the manufacturer.

The requirements of this European Standard are intended to take account of the interaction between the wearer, the apparatus, and where possible the environment in which the apparatus is likely to be used.

This European Standard does not cover saturation diving systems, mini bell systems or apparatus used for oxygen decompression only.

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 132:1998, *Respiratory protective devices — Definitions of terms and pictograms*

EN 134:1998, *Respiratory protective devices — Nomenclature of components*

EN 144-1, *Respiratory protective devices - Gas cylinder valves — Part 1: Thread connections for insert connector*

EN 144-3, *Respiratory protective devices — Gas cylinder valves — Part 3: Outlet connections for diving gases Nitrox and oxygen*

EN 397, *Industrial safety helmets*

EN 812 *Industrial bump caps*

EN 12021, *Respiratory protective devices — Compressed air for breathing apparatus*

EN 14593-1:2005, *Respiratory protective devices — Compressed air line breathing apparatus with demand valve — Part 1: Apparatus with a full face mask — Requirements, testing marking*

EN ISO 12209-1, *Gas cylinders - Outlet connections for gas cylinder valves for compressed breathable air - Part 1: Yoke type connections (ISO 12209-1:2000)*

EN ISO 12209-2, *Gas cylinders - Outlet connections for gas cylinder valves for compressed breathable air - Part 2: Threaded connections (ISO 12209-2:2000)*

EN ISO 12209-3, *Gas cylinders - Outlet connections for gas cylinder valves for compressed breathable air - Part 3: Adaptor for 230 bar valves (ISO 12209-3:2000)*

EN 61508-1, *Functional safety of electrical/electronic/programmable electronic safety-related systems - Part 1: General requirements (IEC 61508-1:1998 + Corrigendum 1999)*