

Respiratory protective devices — Gas cylinder valves —

Part 3: Outlet connections for diving gases Nitrox and oxygen

The European Standard EN 144-3:2003 has the status of a
British Standard

ICS 13.340.30

National foreword

This British Standard is the official English language version of EN 144-3:2003, including Corrigendum December 2003.

The UK participation in its preparation was entrusted by Technical Committee PH/4, Respiratory protection, to Subcommittee PH/4/7, Underwater breathing apparatus, 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;
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This British Standard was published under the authority of the Standards Policy and Strategy Committee on 5 March 2003

Summary of pages

This document comprises a front cover, an inside front cover, the EN title page, pages 2 to 8, an inside back cover and a back cover.

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Amendments issued since publication

Amd. No.	Date	Comments
14997 Corrigendum No. 1	29 February 2004	Figure 1f amended

English version

Respiratory protective devices - Gas cylinder valves - Part 3: Outlet connections for diving gases Nitrox and oxygen

Appareils de protection respiratoire - Robinets de bouteille
à gaz - Partie 3: Raccords de sortie pour gaz de plongée
Nitrox et oxygène

Atemschutzgeräte - Gasflaschenventile - Teil 3:
Gewindeverbindungen am Ausgangsstutzen für die
Tauchgase Nitrox und Sauerstoff

This European Standard was approved by CEN on 21 November 2002.

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Foreword

This document (EN 144-3:2003) 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of an identical text or by endorsement, at the latest by August 2003, and conflicting national standards shall be withdrawn at the latest by August 2003.

This European Standard 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 standard.

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

Introduction

In recognition of the very high number of valves using threads of existing national design and the high costs that would be caused by the unnecessary early replacement of these, it is acknowledged that a 5 year transitional period will be required to phase in valves using the thread described in this standard. During the ensuing period valves may be supplied with threads to the existing national design or to the standard described herein.

1 Scope

This European Standard is applicable to a thread connection used for the connection between a gas cylinder valve and a pressure reducer for respiratory equipment for diving containing breathable nitrox gas with an oxygen content greater than 22 % or oxygen. This European Standard specifies the dimensions and tolerances for connections which are used for respiratory equipment.

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 (including amendments).

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

3 Thread connection for valve outlet

3.1 Thread connection for pressures up to 250 bar (nominal pressure 200 bar)

Figure 1 shows the thread connection and its dimensions to be used for cylinders with a maximum filling pressure of 250 bar.

Dimensions in millimetres

Tolerance: $\pm 0,1$ mm unless specified

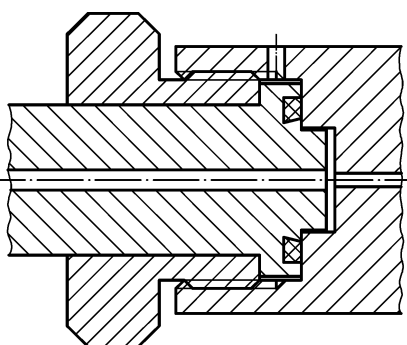


Figure 1a) — Valve outlet connection

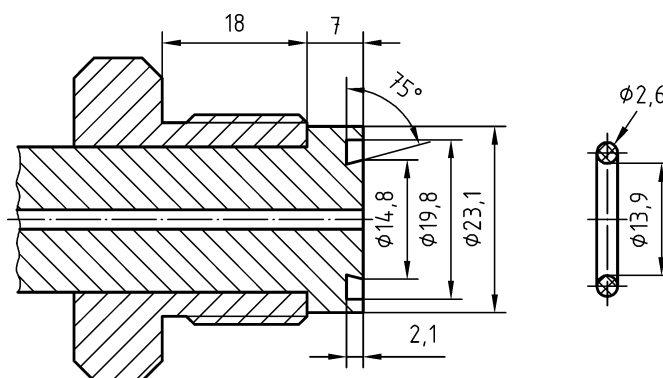


Figure 1b) — Filling connector

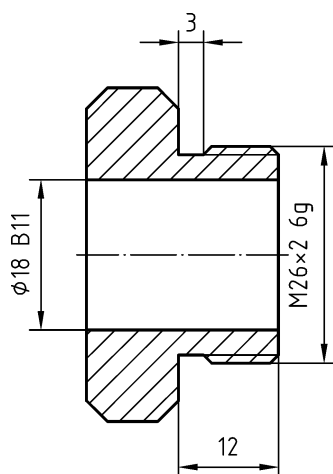


Figure 1c) — Handwheel

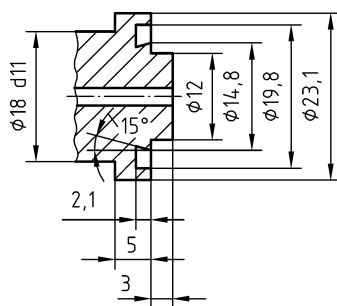


Figure 1d) — Connector

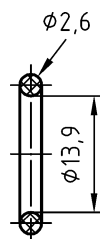


Figure 1e) — O-ring

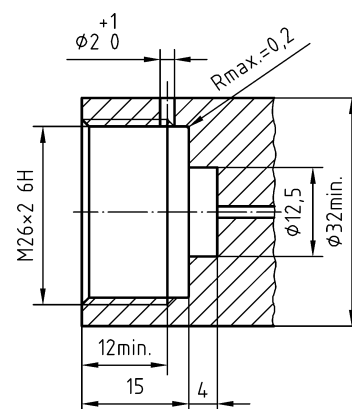


Figure 1f) — Valve outlet

Figure 1 — Thread connection for pressures up to 250 bar

3.2 Thread connection for pressures between 250 bar and 350 bar (nominal pressure 300 bar)

Figure 2 shows the thread connection and its dimensions to be used for cylinders with a maximum filling pressure of 350 bar.

Dimensions in millimetres

Tolerance: $\pm 0,1$ mm unless specified

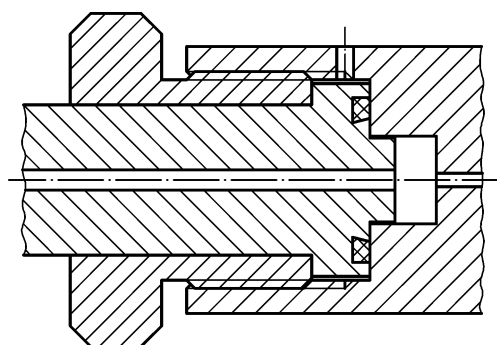


Figure 2a) — Valve outlet connection

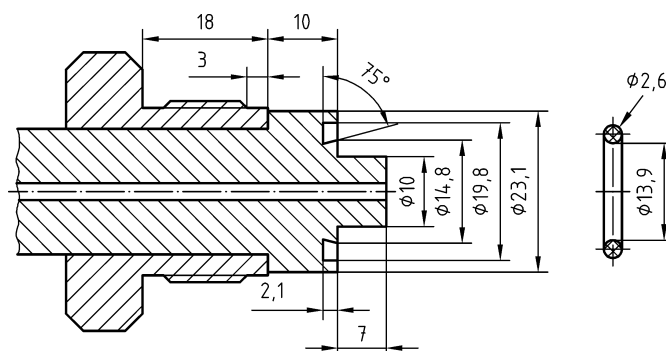


Figure 2b) — Filling connector

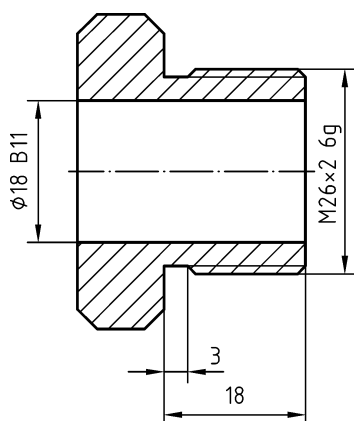


Figure 2c) — Handwheel

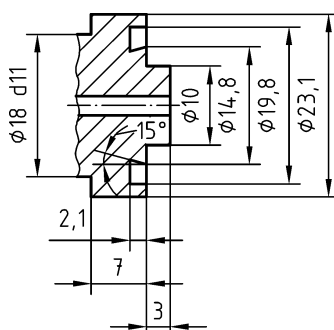


Figure 2d) — Connector

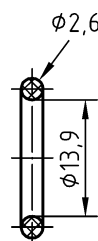


Figure 2e) — O-ring

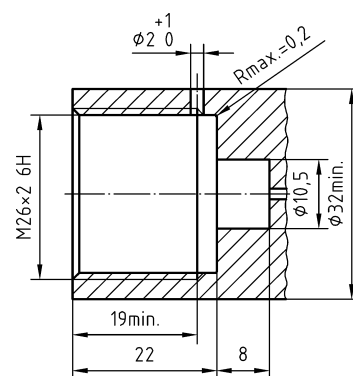


Figure 2f) — Valve outlet

Figure 2 — Thread connection for pressures between 250 bar and 350 bar

4 Marking

In addition to the marking required in EN 144-1 the valve outlet connection shall be permanently marked with "200" for nominal pressure 200 bar connections and with "300" for nominal pressure 300 bar connections.

Annex ZA
(informative)

Clauses of this European Standard addressing essential requirements or other provisions of EU Directives.

This European Standard 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 89/686/EEC, clause 3.10.1.

WARNING: Other requirements and other EU Directives may be applicable to the products falling within the scope of this standard.

Compliance with this standard provides one means of conforming with the specific essential requirements of the Directive concerned and associated EFTA regulations.

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