



Institut luxembourgeois de la normalisation
de l'accréditation, de la sécurité et qualité
des produits et services

ILNAS-EN 144-1:2018

**Respiratory protective devices - Gas
cylinder valves - Part 1: Inlet
connections**

Atenschutzgeräte - Gasflaschenventile -
Teil 1: Eingangsanschlüsse

Appareils de protection respiratoire -
Robinets de bouteille à gaz - Partie 1:
Raccordements d'entrée

04/2018



National Foreword

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EUROPEAN STANDARD ^{ILNAS-EN 144-1:2018} **EN 144-1**
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English Version

**Respiratory protective devices - Gas cylinder valves - Part
1: Inlet connections**

Appareils de protection respiratoire - Robinets de
bouteille à gaz - Partie 1: Raccordements d'entrée

Atemschutzgeräte - Gasflaschenventile - Teil 1:
Eingangsanschlüsse

This European Standard was approved by CEN on 19 February 2018.

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European foreword

This document (EN 144-1:2018) 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of an identical text or by endorsement, at the latest by October 2018, and conflicting national standards shall be withdrawn at the latest by October 2018.

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

This document supersedes EN 144-1:2000.

The following main technical changes have been made compared to EN 144-1:2000:

- a) Title changes to read “Respiratory protective devices — Gas cylinder valves — Part 1: Inlet connections” to be in line with Part 2 and Part 3;
- b) Terms and definition added;
- c) Normative references EN ISO 11363-1 and EN ISO 15245-1 added to replace Clause 2 “Connection on insert connector”;
- d) Clause 3 “Impact resistance” adapted to the test specified in EN ISO 10297:2014, Annex A.

This document is one part of a three-part standard concerning connections for gas cylinder valves for respiratory protective devices:

- Part 1: Inlet connections
- Part 2: Outlet connections
- Part 3: Outlet connections for diving gases Nitrox and oxygen

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This document specifies the dimensions and tolerances as well as the impact resistance and marking requirements of inlet connections for connecting cylinder valves to gas cylinders for respiratory protective devices (RPD).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 ISO 11363-1, *Gas cylinders — 17E and 25E taper threads for connection of valves to gas cylinders — Part 1: Specifications (ISO 11363-1)*

EN ISO 13341, *Gas cylinders — Fitting of valves to gas cylinders (ISO 13341)*

EN ISO 15245-1, *Gas cylinders — Parallel threads for connection of valves to gas cylinders — Part 1: Specification (ISO 15245-1)*

3 Terms and definitions

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

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- IEC Electropedia: available at <http://www.electropedia.org/>
- ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1 working pressure

settled pressure of a compressed gas at a uniform reference temperature of 15 °C in a full gas cylinder, in bar

Note 1 to entry: Common working pressures are 200 bar, 232 bar and 300 bar.

[SOURCE: EN ISO 10286:2015, 736, modified, Note 1 to entry to Note 3 to entry deleted, New Note 1 to entry included]

4 Dimensional and tolerance requirements

4.1 General

For respiratory protective devices only the thread connections M18x1,5 or M25x2 or 17E shall be used.

NOTE M18x1,5 or M25x2 are the preferred thread connections.

Cylinder valves with a thread connection according to this European Standard shall not be used with an adaptor between the cylinder valve and the gas cylinder.

4.2 Parallel threads M18x1,5 and M25x2

The parallel threads M18x1,5 and M25x2 shall meet EN ISO 15245-1.

NOTE As there are other standards which define the above threads, ISO/TR 11364 gives guidance concerning which threads are dimensionally identical and which are interchangeable.