April 2020

DIN EN 15202

ICS 23.060.40

Supersedes
DIN EN 15202:2012-09

LPG equipment and accessories – Essential operational dimensions for LPG cylinder valve outlet and associated equipment connections; English version EN 15202:2019, English translation of DIN EN 15202:2020-04

Flüssiggas-Geräte und Ausrüstungsteile –
Grundlegende Betriebsmaße für Ausgangsanschlüsse von Flaschenventilen für Flüssiggas (LPG) und zugehörige Anschlüsse für Geräte;
Englische Fassung EN 15202:2019,
Englische Übersetzung von DIN EN 15202:2020-04

Équipements pour GPL et leurs accessoires –
Dimensions opérationnelles essentielles des connexions des robinets et valves de bouteilles de GPL et des équipements associés;
Version anglaise EN 15202:2019,
Traduction anglaise de DIN EN 15202:2020-04

Document comprises 84 pages

Translation by DIN-Sprachendienst.

In case of doubt, the German-language original shall be considered authoritative.

07.20 3156772

A comma is used as the decimal marker.

National foreword

This document (EN 15202:2019) has been prepared by Technical Committee CEN/TC 286 "Liquefied Petroleum Gas equipment and accessories" (Secretariat: NSAI, Ireland).

The responsible German body involved in its preparation was *DIN-Normenausschuss Druckgasanlagen* (DIN Standards Committee Pressurized Gas Installations), Working Committee NA 016-00-06 AA "LPG equipment and accessories; national mirror committee for CEN/TC 286".

In addition to the legal units of measurement, this standard also uses the unit "in (inch)", the use of which is not allowed in Germany. It should, however, be noted that the *Gesetz über Einheiten im Messwesen* (German Law on units in metrology) prohibits the use of this unit for official and commercial purposes in Germany. The indication of this unit solely serves to facilitate the communication with those countries where this unit is used (e.g. import-export business).

Conversion:

Non-SI unit	SI unit	Conversion
in (inch)	mm	1 inch = 25,4 mm

The DIN documents corresponding to the international documents referred to in this document are as follows:

ISO 68-1	DIN ISO 68-1
ISO 228 (all parts)	DIN EN ISO 228 (all parts)
ISO 3601-1	DIN ISO 3601-1

Amendments

This standard differs from DIN EN 15202:2012-09 as follows:

a) figures and/or tables for Figure 2 (G.2), Figure 7 (G.7), Figure 10 (G.10), Figure 15 (G.29), Figure 16 (G.30), Figure 20 (G.50), Figure 22 (G.52), Figure 23 (G.53), Figure 26 (G.56) and Figure 27 (G.57) have been revised;

b) the standard has been editorially revised.

Previous editions

DIN EN 15202: 2007-03, 2012-09

National Annex NA
(informative)

Bibliography

DIN EN ISO 228 (all parts), *Pipe threads where pressure-tight joints are not made on the threads*

DIN ISO 68-1, *ISO general purpose metric screw threads — Basic profile — Part 1: Metric screw threads*

DIN ISO 3601-1, *Fluid power systems — O-rings — Part 1: Inside diameters, cross-sections, tolerances and designation codes*

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

EN 15202

December 2019

ICS 23.060.40

Supersedes EN 15202:2012

English Version

LPG equipment and accessories - Essential operational dimensions for LPG cylinder valve outlet and associated equipment connections

Équipements pour GPL et leurs accessoires - Dimensions opérationnelles essentielles des connexions des robinets et valves de bouteilles de GPL et des équipements associés

Flüssiggas-Geräte und Ausrüstungsteile - Grundlegende Betriebsmaße für Ausgangsanschlüsse von Flaschenventilen für Flüssiggas (LPG) und zugehörige Anschlüsse für Geräte

This European Standard was approved by CEN on 23 September 2019.

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.

CEN members are the national standards bodies of 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

Ref. No. EN 15202:2019 E

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European foreword

This document (EN 15202:2019) has been prepared by Technical Committee CEN/TC 286 “Liquefied petroleum gas equipment and accessories”, the secretariat of which is held by NSAI.

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 June 2020, and conflicting national standards shall be withdrawn at the latest by June 2020.

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.

This document supersedes EN 15202:2012.

The revisions to this document include amendments to figures and/or tables for:

— Figure 2 (G.2),

— Figure 7 (G.7),

— Figure 10 (G.10),

— Figure 15 (G.29),

— Figure 16 (G.30),

— Figure 20 (G.50),

— Figure 22 (G.52),

— Figure 23 (G.53),

— Figure 26 (G.56),

— Figure 27 (G.57).

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Introduction

The primary objective of this document is to ensure the safe connection of LPG cylinder valves to their connectors.

This document is the fundamental source for identifying the essential manufacturing dimensions of the LPG cylinder valve connections used in Europe.

EN 16129 is the fundamental source for identifying the essential manufacturing dimensions of connector types that are not used in LPG cylinder valve connections.

This document identifies the existing cylinder valves and the connectors that are currently in use with LPG.

It is the intention that only connections which are identified in this document should be used with LPG cylinder valves.

1 Scope

This document specifies basic connection dimensions of LPG cylinder valves (manufactured in accordance with EN ISO 14245 and EN ISO 15995) and connectors (including pressure regulators) to enable them to be safely connected together.

NOTE 1 Figure 1 (type G.1) to Figure 19 (type G.33) give the types of threaded outlet connections.

NOTE 2 Figure 20 (type G.50) to Figure 34 (type G.66) give the types of non-threaded outlet connections.

This document lists potentially unsafe connections where it might be possible to connect together, but which, when connected, might not be sound or secure in some operating conditions or orientations.

This document specifies a marking system that is intended to ensure that only valves and connecters that are marked with the same connector type number are used in combination.

This document also recommends tightening torques for the attachment of screwed metal-to-metal connections.

Quality assurance systems, production testing and particularly certificates of conformity are not covered in this document.

This document excludes connections for automotive vehicles covered by UN/ECE Regulation No. 67 Part 1 and EN 13760.

This document excludes connections for gas cartridges covered by EN 417.

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 549, *Rubber materials for seals and diaphragms for gas appliances and gas equipment*

EN 560, *Gas welding equipment – Hose connections for equipment for welding, cutting and allied processes*

ISO 4658, *Acrylonitrile-butadiene rubber (NBR) – Evaluation procedure*

ANSI/CGA V-1, *American National, Compressed Gas Association Standard for Compressed Gas Cylinder Valve Outlet and Inlet Connections*

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 https://www.iso.org/obp

3.1
liquefied petroleum gas
LPG
low pressure gas composed of one or more light hydrocarbons which are assigned to UN 1011, UN 1075, UN 1965, UN 1969 or UN 1978 only and which consists mainly of propane, propene, butane, butane isomers, butene with traces of other hydrocarbon gases

3.2
connector
device that attaches to a cylinder valve to allow the passage of LPG to or from the cylinder

3.3
valve operating mechanism
mechanism that opens the valve when, or after, a regulator or connector is fitted and closes the valve automatically when, or before, a regulator or connector is disconnected

4 Symbols and abbreviations

NBR	Nitrile Butadiene Rubber (Acrylonitrile-butadiene rubber) (see ISO 4658).
STP	Standard Temperature and Pressure [15,6 °C (288,7 K), 1,013 bar absolute (0,101 3 MPa absolute)]
IRHD	International Rubber Hardness Degrees
LH	Left hand
RH	Right hand
INT	Internal thread
EXT	External thread
ref	make reference to