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**Road vehicles — Liquefied natural  
gas (LNG) integrated low pressure  
refuelling and venting connector —  
1,8 MPa connector**



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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 22, *Road Vehicles*, Subcommittee SC 41, *Specific aspects for gaseous fuels*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at [www.iso.org/members.html](http://www.iso.org/members.html).



# Road vehicles — Liquefied natural gas (LNG) integrated low pressure refuelling and venting connector — 1,8 MPa connector

## 1 Scope

This document specifies liquefied natural gas (LNG) refuelling nozzles and receptacles constructed entirely of new and unused parts and materials for road vehicles powered by LNG.

An LNG refuelling connector consists of, as applicable, the receptacle and the nozzle. This document is applicable only to such devices designed for a working pressure of 1,8 MPa to those using LNG as vehicle fuel and having standardized mating components.

**NOTE** All references to pressures in this document are considered gauge pressures, unless otherwise specified.

## 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.

ISO 15500-2, *Road vehicles — Compressed natural gas (CNG) fuel system components — Part 2: Performance and general test methods*

ISO 19723 (all parts), *Road vehicles — Liquefied natural gas (LNG) fuel systems*

## 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:

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

### 3.1

#### **check valve**

part of the receptacle, or of the nozzle, mounted inside which prevents return flow or venting of fuel after the nozzle was disconnected from the receptacle

### 3.2

#### **cycle life**

number of refuelling cycles, as specified in this document, which the component can withstand without leak or without another fail of function

### 3.3

#### **device**

nozzle or receptacle