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**Road vehicles — Liquefied natural  
gas (LNG) refuelling connector — 3,1  
MPa connector**

*Véhicules routiers — Connecteur pour le remplissage de gaz naturel  
liquéfié (GNL) — Connecteur à 3,1 MPa*



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Published in Switzerland

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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 on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT), see the following URL: [Foreword — Supplementary information](#).

The committee responsible for this document is ISO/TC 22, *Road vehicles*, Subcommittee SC 25, *Vehicles using gaseous fuels*.



# Road vehicles — Liquefied natural gas (LNG) refuelling connector — 3,1 MPa connector

## 1 Scope

This International Standard 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 its protective cap (mounted on the vehicle) and the nozzle. This International standard is applicable only to such devices designed for a maximum working pressure of 3,4 MPa (34 bar) to those using LNG as vehicle fuel and having standardized mating components.

**NOTE** All references to pressures given in megapascals and bar (1 bar = 0,1 MPa = 105 Pa; 1 MPa = 1 N/mm<sup>2</sup>) are to be considered gauge pressures, unless otherwise specified.

## 2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 14469, *Road vehicles — Compressed natural gas (CNG) refuelling connector*

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

## 3 Terms and definitions

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

### 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 International Standard, which the component can withstand without leak or without another fail of function

### 3.3

#### **device**

nozzle or receptacle

### 3.4

#### **dry air**

air with moisture content such that the dew point of the air at the required test pressure is at least 11 °C below the ambient test temperature

### 3.5

#### **hydrostatic pressure**

pressure to which a component is taken to verify the structural strength of the component