STN

Cestné vozidlá Plniaci konektor na skvapalnený zemný plyn (LNG) Konektor 3,1 MPa (ISO 12617: 2015, opravená verzia 2016-01-15)

STN EN ISO 12617

30 2311

Road vehicles - Liquefied natural gas (LNG) refuelling connector - 3,1 MPa connector (ISO 12617:2015)

Táto norma obsahuje anglickú verziu európskej normy. This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/17

Obsahuje: EN ISO 12617:2017, ISO 12617 Corrected version 2016-01-15:2015

STN EN ISO 12617: 2017

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 12617

April 2017

ICS 43.060.40

English Version

Road vehicles - Liquefied natural gas (LNG) refuelling connector - 3,1 MPa connector (ISO 12617:2015, Corrected version 2016-01-15)

Véhicules routiers - Connecteur de remplissage de gaz naturel liquéfié (GNL) - Connecteur à 3,1 MPa (ISO 12617:2015, Version corrigée 2016-01-15) Straßenfahrzeuge - Betankungsanschluss für verflüssigtes Erdgas (LNG) - 3,1 MPa Anschluss (ISO 12617:2015, korrigierte Fassung 2016-01-15)

This European Standard was approved by CEN on 24 March 2017.

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, 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 United Kingdom.



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

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

EN ISO 12617:2017 (E)

Contents	Page
Francisco formand	2
European foreword	

European foreword

The text of ISO 12617:2015, Corrected version 2016-01-15 has been prepared by Technical Committee ISO/TC 22 "Road vehicles" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 12617:2017 by Technical Committee CEN/TC 301 "Road vehicles" the secretariat of which is held by AFNOR.

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 2017, and conflicting national standards shall be withdrawn at the latest by October 2017.

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

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.

Endorsement notice

The text of ISO 12617:2015, Corrected version 2016-01-15 has been approved by CEN as EN ISO 12617:2017 without any modification.

INTERNATIONAL STANDARD

ISO 12617

First edition 2015-03-15
Corrected version 2016-01-15

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



ISO 12617:2015(E)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2015, Published in Switzerland

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office Ch. de Blandonnet 8 • CP 401 CH-1214 Vernier, Geneva, Switzerland Tel. +41 22 749 01 11 Fax +41 22 749 09 47 copyright@iso.org www.iso.org

Co	Contents				
Fore	word		v		
1	Scop	e	1		
2	Norn	native references	1		
3		ns and definitions			
4	General construction requirements				
	4.1	General			
	4.2	LNG refuelling nozzles			
	4.3	LNG nozzles and receptacles	3		
	4.4	Pressure rating			
		4.4.1 Working pressure (maximum allowable pressure)			
		4.4.2 Maximum service pressure 4.4.3 Hydrostatic pressure			
		4.4.4 Working temperature			
	4.5	Materials			
		4.5.1 Corrosion protection	4		
		4.5.2 LNG nozzle and receptacles			
	4.6	4.5.3 Material of the bodies of the receptacle and of the nozzle			
	4.6 4.7	Hand operation			
	4.7 4.8	Sealing exchangeInstallation			
_					
5	Nozz 5.1	Venting depressurization			
	5.1	Identification			
	5.3	Internal check valve			
6	Stan	dard receptacle dimensions			
U	6.1	Drawing			
7		ptacle			
/	7.1	Cycle life			
	7.2	Design			
	7.3	Protective cap			
	7.4	Mounting			
	7.5	Maximum working temperature	7		
8	Instructions				
	8.1	Clarity			
	8.2	List of tools	7		
9	Marking				
	9.1	Clarity			
	9.2	Manufacturer and International Standard information			
	9.3	Date of manufacture			
		9.3.1 First and second digits			
	9.4	Alternative marking			
	9.5	Additional marking			
10	Tests				
	10.1	General requirements			
	10.2	User interface			
		10.2.1 Positive locking			
		10.2.2 Safe disconnection	9		
		10.2.3 Manual force in warm conditions			
	10.2	10.2.4 Manual force at cold conditions under frost Impact resistance of a nozzle			
	10.3	IIIIPact I Colotalice VI a livalic			

STN EN ISO 12617: 2017

ISO 12617:2015(E)

	10.4	Receptacle protective cap	10
	10.5	Receptacle protective cap Leakage at room temperature 10.5.1 Nozzle	10
		10.5.1 Nozzle	10
		10.5.2 Recentacle	10
	10.6	Abnormal loads	11
		10.6.1 General	11
		10.6.2 Test in the unpressurized condition 10.6.3 Test in pressurized condition	11
		10.6.3 Test in pressurized condition	11
	10.7	Durability of the device (Cycle life) 10.7.1 Concept of the test of a device 10.7.2 Cycle definition	12
		10.7.1 Concept of the test of a device	12
		10.7.2 Cycle definition	12
		10.7.3 Test series	12
		10.7.4 Exchange of seal of the nozzle and/or receptacle	12
	10.8	Electrical conductivity	12
	10.9	Electrical conductivity Hydrostatic strength 10.9.1 Test configurations	13
		10.9.1 Test configurations	13
		10.9.2 Test procedure and evaluation	13
	10.10		13
	10.11	Non-igniting evaluation	13
Riblio	granhv	y	14
	A- ~ P-1.	,	

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).

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).

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*.

The corrected version of ISO 12617:2015 incorporates the following corrections.

Figure 1 has been corrected and the key to Figure 1 has been updated to reflect the changes.

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/mm²) 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

koniec náhľadu – text ďalej pokračuje v platenej verzii STN