

# DIN EN ISO 12617:2017-09 (E)

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

---

<b>Contents</b>		<b>Page</b>
European foreword .....		4
Foreword .....		5
1	Scope .....	6
2	Normative references .....	6
3	Terms and definitions .....	6
4	General construction requirements .....	8
4.1	General .....	8
4.2	LNG refuelling nozzles .....	8
4.3	LNG nozzles and receptacles .....	8
4.4	Pressure rating .....	9
4.4.1	Working pressure (maximum allowable pressure) .....	9
4.4.2	Maximum service pressure .....	9
4.4.3	Hydrostatic pressure .....	9
4.4.4	Working temperature .....	9
4.5	Materials .....	9
4.5.1	Corrosion protection .....	9
4.5.2	LNG nozzle and receptacles .....	9
4.5.3	Material of the bodies of the receptacle and of the nozzle .....	9
4.6	Hand operation .....	9
4.7	Sealing exchange .....	9
4.8	Installation .....	10
5	Nozzles .....	10
5.1	Venting depressurization .....	10
5.2	Identification .....	10
5.3	Internal check valve .....	10
6	Standard receptacle dimensions .....	10
6.1	Drawing .....	10
7	Receptacle .....	11
7.1	Cycle life .....	11
7.2	Design .....	11
7.3	Protective cap .....	11
7.4	Mounting .....	12
7.5	Maximum working temperature .....	12
8	Instructions .....	12
8.1	Clarity .....	12
8.2	List of tools .....	12
9	Marking .....	12
9.1	Clarity .....	12
9.2	Manufacturer and International Standard information .....	12
9.3	Date of manufacture .....	13
9.3.1	First and second digits .....	13

9.3.2	Third and fourth digits .....	13
9.4	Alternative marking .....	13
9.5	Additional marking .....	13
10	Tests .....	13
10.1	General requirements .....	13
10.2	User interface .....	14
10.2.1	Positive locking .....	14
10.2.2	Safe disconnection .....	14
10.2.3	Manual force in warm conditions .....	14
10.2.4	Manual force at cold conditions under frost .....	14
10.3	Impact resistance of a nozzle .....	14
10.4	Receptacle protective cap .....	15
10.5	Leakage at room temperature .....	15
10.5.1	Nozzle .....	15
10.5.2	Receptacle .....	15
10.6	Abnormal loads .....	16
10.6.1	General .....	16
10.6.2	Test in the unpressurized condition .....	16
10.6.3	Test in pressurized condition .....	16
10.7	Durability of the device (Cycle life) .....	17
10.7.1	Concept of the test of a device .....	17
10.7.2	Cycle definition .....	17
10.7.3	Test series .....	17
10.7.4	Exchange of seal of the nozzle and/or receptacle .....	17
10.8	Electrical conductivity .....	17
10.9	Hydrostatic strength .....	18
10.9.1	Test configurations .....	18
10.9.2	Test procedure and evaluation .....	18
10.10	Corrosion resistance .....	18
10.11	Non-igniting evaluation .....	18
	Bibliography .....	19