

ISO 12617:2015-03 (E)

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

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

10 Tests 8

10.1	General requirements	8
10.2	User interface	9
10.2.1	Positive locking	9
10.2.2	Safe disconnection	9
10.2.3	Manual force in warm conditions	9
10.2.4	Manual force at cold conditions under frost	9
10.3	Impact resistance of a nozzle	9
10.4	Receptacle protective cap	10
10.5	Leakage at room temperature	10
10.5.1	Nozzle	10
10.5.2	Receptacle	10
10.6	Abnormal loads	11
10.6.1	General	11
10.6.2	Test in the unpressurized condition	11
10.6.3	Test in pressurized condition	11
10.7	Durability of the device (Cycle life)	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	Hydrostatic strength	13
10.9.1	Test configurations	13
10.9.2	Test procedure and evaluation	13
10.10	Corrosion resistance	13
10.11	Non-igniting evaluation	13
Bibliography		14