ISO 14469:2017-01 (E)

Road vehicles - Compressed natural gas (CNG) refuelling connector

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 1

4 General construction requirements 2

5 Nozzles 3

6 Standard receptacle dimensions 4
6.1 Standard receptacle dimensions Size 1 (B200, B250) 4
6.2 Standard receptacle dimensions size 2 (C200, C250) 7

7 Receptacles 10

8 Instructions 11

9 Marking 11

10 Tests 12
10.1 General requirements 12
10.2 User interface 12
10.3 Impact resistance 12
10.4 Receptacle protective caps 13
10.5 Leakage at room temperature 13
10.5.1 Nozzle 13
10.5.2 Receptacle 13
10.6 Valve operating handle 14
10.7 Abnormal loads 14
10.7.1 General 14
10.7.2 Test in the unpressurized condition 15
10.7.3 Test in the pressurized condition 15
10.8 Rocking/Twisting 15
10.9 Mounting hardware torque 16
10.10 Low and high temperatures 16
10.10.1 General 16
10.10.2 Leakage test 16
10.10.3 Operation test 17
10.11 Durability 17
10.11.1 Durability cycling 17
10.11.2 Oxygen ageing 23
10.11.3 Seal material compatibility 23
10.11.4 Ten-day moist ammonia-air stress cracking 24
10.11.5 Electrical resistance 24
10.12 Hydrostatic strength 24
10.13 Corrosion resistance 24
10.13.1 Nozzles 25

10.13.2 Receptacles 25
10.14 Deformation 25
10.15 Non-igniting evaluation 25
10.16 Pressure-tight protective cap (PTPC) 25
10.16.1 General 25
10.16.2 Leakage 26
10.16.3 Durability cycling 26
10.16.4 Abuse 27
10.16.5 Impact resistance 27
10.16.6 Corrosion resistance 27
10.16.7 Hydrostatic strength 27

Annex A (informative) Nozzle characteristics 28

Annex B (normative)Receptacletextfixture 29

Bibliography 37