DIN EN 12252:2012-12 (E)

LPG equipment and accessories - Equipping of LPG road tankers

Contents

Page

Foreword 4

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Requirements 9
4.1 General 9
4.2 Equipment 10
4.3 Valve access 10

5 Pressure vessel 10
5.1 Design and manufacture 10
5.2 Mounting of pressure vessel on road tanker 11
5.2.1 General 11
5.2.2 Mounting 11

6 Pressure vessel accessories 11
6.1 Required pressure vessel accessories 11
6.1.1 Contents gauge 11
6.1.2 Pressure gauge 11
6.1.3 Primary shut-off system 12
6.2 Optional pressure vessel accessories 13

7 Vehicle LPG equipment 13
7.1 Mandatory LPG equipment 13
7.1.1 General 13
7.1.2 Pipework 13
7.1.3 Connecting hoses 13
7.1.4 Acessories 13
7.1.5 Earth connection 14
7.2 Optional LPG equipment 14

8 Equipment specifications 14
8.1 Suitable materials 14
8.1.1 General 14
8.1.2 Steel pressure retaining parts 15
8.1.3 Non-pressure retaining parts 15
8.1.4 Welding consumables 15
8.1.5 Non-metallic materials 15
8.1.6 Pipework 15
8.1.7 Certification of materials 15
8.1.8 Control of materials 15
8.2 Contents gauge 16
8.3 Pressure gauge 16
8.4 Temperature gauge 16
8.5 Pump 16
8.6 Hoses 17

8.7 Hose reel 17
8.8 Earth reel 17
8.9 Metering system 17
8.10 Valves 17
8.11 Pressure relief valves (PRV) 18

9 Assembly 18
9.1 General 18
9.2 Welding 18
9.2.1 Welding of the pressure containing parts 18
9.2.2 Welding of the non pressure containing parts 19
9.3 Flanged connections 19
9.4 Screwed connections 19
9.5 External corrosion protection 19

10 Inspection and testing 19
10.1 General 19
10.2 Hydraulic pressure test 19
10.3 Leak test 20

11 Safety systems 20
11.1 General 20
11.2 Emergency Shut-Down system (ESD) 20

12 General safety requirements 21

Annex A (normative) Discharge rates for pressure relief valves -- Discharge capacity 22

Annex B (informative) Calculation of mountings of pressure vessel to the chassis 24

Annex C (informative) Environmental Checklist 31

Bibliography 32