DIN EN 137:2007-01 (E)

Respiratory protective devices - Self-contained open-circuit compressed air breathing apparatus with full face mask - Requirements, testing, marking

Contents

Page

Foreword 4

1 Scope 6

2 Normative references 6

3 Terms and definitions 7

4 Description 7

5 Classification 7

6 Requirements 7
6.1 General 7
6.2 Ergonomics 7
6.3 Design 7
6.4 Materials 8
6.5 Cleaning and disinfecting 9
6.6 Mass 9
6.7 Connections 9
6.8 Full face mask 10
6.9 Body harness 10
6.10 Practical performance 10
6.11 Resistance to temperature and flammability 11
6.12 Protection against particulate matter 12
6.13 High and medium pressure parts 12
6.14 Pressure vessel(s) 12
6.15 Pressure vessel valve(s) 12
6.16 Pressure reducer 13
6.17 Pressure indicator and tube 13
6.18 Warning device 14
6.19 Flexible hoses and tubes 15
6.20 Lung governed demand valve 15
6.21 Breathing resistance 16
6.22 Static pressure 17
6.23 Leak-tightness 17
6.24 Pre-conditioning 18

7 Testing 18
7.1 General 18
7.2 Nominal values and tolerances 18
7.3 Visual inspection 18
7.4 Resistance to temperature and flammability 18
7.5 Pressure reducer 21
7.6 Warning device 21
7.7 Leak-tightness 21
7.8 Water immersion 22
7.9 Strength of connections to full face mask, demand valve and breathing hose (if fitted) 22
7.10 Resistance to collapse of breathing hose 22
7.11 Practical performance 23
7.12 Breathing resistance 23

8 Marking 24

9 Information supplied by the manufacturer 24

Annex A (normative) Second medium pressure connector 32

A.1 General 32
A.2 Requirements 32
A.3 Information supplied by the manufacturer 33

Annex B (normative) Ambient air bypass device 34

B.1 General 34
B.2 Requirements 34
B.3 Information supplied by the manufacturer 34

Annex C (normative) Requirements for static and dynamic pressure for apparatus with thread connector in accordance with EN 148-3 35

C.1 General 35
C.2 Static pressure 35
C.3 Dynamic pressure 35
C.4 Exhalation valve 35
C.5 Testing of dynamic pressure 36

Annex D (informative) Marking 37

Annex ZA (informative) Relationship between this European Standard and the Essential Requirements of EU Directive 89/686/EEC (PPE) 38

Bibliography 41