ISO 17420-6:2021-02 (E)

Respiratory protective devices - Performance requirements - Part 6: Special application escape - Filtering RPD and supplied breathable gas RPD

Contents

Page

Foreword ..... **iv**

Introduction ..... **v**

1 Scope **1**

2 Normative references **1**

3 Terms, definitions and abbreviations **2**
3.1 Terms and definitions 2
3.2 Abbreviated terms 3

4 Classification overview **3**
4.1 General 3
4.2 Supplied breathable gas RPD for escape 3
4.3 Filtering RPD for escape 4

5 General requirements for RPD **4**

6 Basic requirements for supplied breathable gas RPD and filtering RPD **4**

7 Special application for supplied breathable gas escape RPD and filtering escape RPD **4**
7.1 Special application escape RPD - Requirement matrices 4
7.1.1 General 4
7.1.2 Supplied breathable gas RPD — Escape 4
7.1.3 Filtering escape RPD 6
7.2 Requirements for special application escape RPD 8
7.2.1 Exposure to dust 8
7.2.2 Contact with hot or cold surfaces generated by the RPD 8
7.2.3 Avoidance of frictional sparks - Filtering escape RPD and supplied breathable gas escape RPD 9
7.2.4 Resistance to flame 9
7.2.5 Mechanical Requirement 10
7.2.6 Requirements for escape RPD used in explosive atmospheres and electromagnetic compatibility 10
7.2.7 Antistatic properties - Filtering escape RPD and supplied breathable gas escape RPD 11
7.2.8 Eye irritation (external) - Filtering escape RPD and supplied breathable gas escape RPD 11
7.2.9 Determination of duration 12
7.2.10 Validation of escape RPD performance requirements 14
7.3 Pre-conditioning 28
7.3.1 Exposure to impact from drop — Filtering escape RPD and supplied breathable gas escape RPD 28
7.3.2 Resistance to changes in atmospheric pressure 28
7.3.3 Intermittent exposure to salt spray 28
7.3.4 Exposure to vibration and shock for supplied breathable gas escape RPD 29
7.3.5 Exposure to vibration and shock - marine 29
7.3.6 Exposure to vibration and shock - mining 30
7.3.7 Filtering escape RPD 31

8 Inspection **31**
8.1 General 31
8.2 Inspection 31
8.3 Testing of leak tightness using positive pressure 32

9 Marking **32**

10 Information supplied by the RPD manufacturer **32**