DIN EN ISO 17879:2017-12 (E)

Gas cylinders - Self-closing cylinder valves - Specification and type testing (ISO 17879:2017)

Contents

Page

European foreword ... **3**

Foreword ... **4**

Introduction ... **5**

Scope ... **6**

Normative references ... **6**

Terms and definitions ... **6**

Valve description ... **8**

Valve design requirements ... **9**
5.1 General ... 9
5.2 Materials ... 9
5.3 Valve connections ... 10
5.4 Mechanical strength ... 11
5.4.1 Resistance to hydraulic burst pressure ... 11
5.4.2 Resistance to mechanical damage ... 11
5.5 Valve operating mechanism ... 11
5.6 Leakage ... 11
5.7 Resistance to ignition ... 12
5.8 Resistance to acetylene flashback ... 12
5.9 Manufacturing tests and examinations ... 12

Type testing ... **13**
6.1 General ... 14
6.2 Documentation ... 14
6.3 Test samples ... 15
6.4 Test report ... 15
6.5 Test temperatures ... 15
6.6 Test pressures ... 15
6.6.1 Valve burst test pressure ... 15
6.6.2 Valve test pressure ... 15
6.7 Test gases ... 16
6.7.1 Gas quality ... 16
6.7.2 Leak tightness tests ... 16
6.7.3 Endurance test ... 16
6.7.4 Oxygen pressure surge test ... 16
6.8 Test schedule ... 16
6.9 Hydraulic burst pressure test ... 18
6.10 Leak tightness tests ... 18
6.10.1 General ... 18
6.10.2 Internal leak tightness test ... 18
6.10.3 External leak tightness test ... 19
6.11 Endurance test ... 19
6.12 Visual examination ... 20

Marking ... **20**

Annex A (normative) **Mechanical strength tests** ... **21**

Annex B (normative) **Acetylene tests** ... **24**

Annex C (normative) **Oxygen pressure surge test** ... **25**

Annex D (normative) **Manufacturing tests and examinations** ... **26**

Bibliography ... **27**