DIN EN ISO 10297:2014-10 (E)

Gas cylinders - Cylinder valves - Specification and type testing (ISO 10297:2014)

Contents

Page

Foreword 3

Introduction 5

1 Scope 6

2 Normative references 6

3 Terms, definitions and symbols 7

4 Valve description 11

5 Valve design requirements 16
5.1 General 16
5.2 Materials 17
5.3 Dimensions 17
5.4 Valve connections 18
5.5 Mechanical strength 19
5.6 Valve operating mechanism 19
5.7 Valve operating device 22
5.8 Leakage 22
5.9 Resistance to ignition 22

6 Type testing 23
6.1 General 23
6.2 Documentation 25
6.3 Test samples 25
6.4 Test report 25
6.5 Test temperatures 26
6.6 Test pressures 26
6.7 Test gases 26
6.8 Test schedule 27
6.9 Hydraulic burst pressure test 29
6.10 Flame impingement test 30
6.11 Excessive torque tests 30
6.12 Leak tightness tests 30
6.13 Endurance test 32
6.14 Visual examination 33

7 Marking 33

Annex A (normative) Impact test 35

Annex B (normative) Tests for acetylene valves 37

Annex C (normative) Oxygen pressure surge test 38

Annex D (informative) Example of test schedule 42

Annex E (informative) Example of a vacuum test 43

Annex F (normative) Endurance test machine 44

Bibliography 46