ISO 23551-10:2016-08 (E)

Safety and control devices for gas burners and gas-burning appliances - Particular requirements - Part 10: Vent valves

Contents

Page

Foreword v

Introduction vi

1 Scope 1

2 Normative references 1

3 Termsanddefinitions 2

4 Classification 3
4.1 Classes of controls 3
4.2 Groups of controls 3

5 Test conditions 3

6 Construction 3
6.1 General 3
6.2 Construction requirements 3
6.2.1 Appearance 3
6.2.2 Holes 3
6.2.3 Breather holes 3
6.2.4 Screwed fastenings 3
6.2.5 Jointing 3
6.2.6 Moving parts 4
6.2.7 Sealing caps 4
6.2.8 Dismantling and reassembling for servicing and/or adjustment 4
6.2.9 Auxiliary channels 4
6.2.10 Open position indicator switch 4
6.2.11 Controls assembled to a valve 4
6.3 Materials 4
6.3.1 General material requirements 4
6.3.2 Housing 4
6.3.3 Springs 4
6.3.4 Resistance to corrosion and surface protection 4
6.3.5 Impregnation 5
6.3.6 Seals for glands for moving parts 5
6.3.7 Closure member 5
6.4 Gas connections 5
6.4.1 Making connections 5
6.4.2 Connection sizes 5
6.4.3 Threads 5
6.4.4 Union joints 5
6.4.5 Flanges 5
6.4.6 Compression fittings 5
6.4.7 Nipples for pressure tests 5
6.4.8 Strainers 5
6.4.9 Pneumatic and hydraulic actuating mechanisms 5

7 Performance 6
7.1 General 6

7.2 Leak-tightness 6
7.2.1 Criteria 6
7.2.2 Test for leak-tightness 6
7.3 Torsion and bending 6
7.4 Rated flow rate 6
7.5 Durability 6
7.6 Functional requirements 6
7.6.1 Requirement 6
7.6.2 Test of opening function 7
7.7 Endurance 7
7.7.1 Requirement 7
7.7.2 Endurance test 7
7.7.3 Endurance test for open position indicator switch 8
7.8 Opening force 8
7.8.1 Requirement 8
7.8.2 Test of opening force 8
7.9 Opening time 8
7.9.1 Requirement 8
7.9.2 Test of opening time 8
7.10 Delay time and closing time 8
7.10.1 Requirement 8
7.10.2 Test of delay time and closing time 9
7.11 Open position indicator switch 9
7.11.1 Requirement 9
7.11.2 Test of open position indicator switch 9

8 EMC/Electrical requirements 9

9 Marking, installation and operating instructions 9
9.1 Marking 9
9.2 Installation and operating instructions 9
9.3 Warning notice 10

Annex A (informative) Leak-tightness test -- Volumetric method 11

Annex B (informative) Leak-tightness test -- Pressure-loss method 12

Annex C (normative) Conversion of pressure loss into leakage rate 13

Annex D (normative)Testforimmunitytopower-frequencymagneticfields 14

Annex E (normative)SpecificregionalrequirementsinEuropeancountries 15

Annex F (normative)SpecificregionalrequirementsinCanadaandUSA 16

Annex G (normative)SpecificregionalrequirementsinJapan 17

Bibliography 18