DIN EN ISO 15761:2021-04 (E)

Steel gate, globe and check valves for sizes DN 100 and smaller, for the petroleum and natural gas industries (ISO 15761:2020); English version EN ISO 15761:2020

Contents

Page

Foreword ..... **v**

Introduction ..... **vi**

1 Scope **1**

2 Normative references **1**

3 Terms and definitions **3**

4 Pressure/temperature ratings **3**
4.1 Valve ratings 3
4.2 Temperature constraints 4

5 Design **4**
5.1 Reference design 4
5.2 Flow passageway 5
5.3 Wall thickness 6
5.4 Valve body 7
5.4.1 General 7
5.4.2 Socket welding ends 7
5.4.3 Threaded ends 8
5.4.4 Flanged ends 9
5.4.5 Butt-welding ends 10
5.4.6 Body seats 11
5.5 Valve bonnet or cover 11
5.6 Obturator 13
5.6.1 Seating surfaces 13
5.6.2 Gate valve obturators 13
5.6.3 Globe valve obturators 13
5.6.4 Check valve obturators 13
5.7 Stem 14
5.8 Stem nut or stem bushing 16
5.9 Packing, packing chamber, and gland 16
5.10 Packing retention 17
5.11 Handwheel 17

6 Materials **17**
6.1 Trim materials 17
6.2 Materials other than trim 17

7 Marking **18**
7.1 Legibility 18
7.2 Body marking 18
7.3 Ring joint groove marking 20
7.4 Identification plate marking 20
7.5 Weld fabrication marking 21

8 Testing and inspection **21**
8.1 Pressure tests 21
8.1.1 General 21
8.1.2 Shell test 22
8.1.3 Closure leakage test 22
8.1.4 Optional closure leakage test for gate valves 23
8.1.5 Backseat leakage test 23
8.1.6 Fugitive emission testing 23
8.2 Inspection 24
9 Preparation for despatch **24**
Annex A (normative) **Requirements for extended body gate valve bodies** **25**
Annex B (normative) **Requirements for valves with bellows stem seals** **30**
Annex C (normative) **Type testing of bellows stem seals** **34**
Annex D (informative) **Identification of valve parts** **37**
Annex E (informative) **Information to be specified by the purchaser** **40**
Annex F (informative) **Valve material combinations** **42**
Bibliography **46**