

ISO 15761:2020 (E)

Steel gate, globe and check valves for sizes DN 100 and smaller, for the petroleum and natural gas industries

Contents

	Foreword
	Introduction
1	Scope
2	Normative references
3	Terms and definitions
4	Pressure/temperature ratings
4.1	Valve ratings
4.2	Temperature constraints
5	Design
5.1	Reference design
5.2	Flow passageway
5.3	Wall thickness
5.4	Valve body
5.4.1	General
5.4.2	Socket welding ends
5.4.3	Threaded ends
5.4.4	Flanged ends
5.4.5	Butt-welding ends
5.4.6	Body seats
5.5	Valve bonnet or cover
5.6	Obturator
5.6.1	Seating surfaces
5.6.2	Gate valve obturators
5.6.3	Globe valve obturators
5.6.4	Check valve obturators
5.7	Stem
5.8	Stem nut or stem bushing
5.9	Packing, packing chamber, and gland
5.10	Packing retention
5.11	Handwheel
6	Materials
6.1	Trim materials
6.2	Materials other than trim
7	Marking
7.1	Legibility
7.2	Body marking
7.3	Ring joint groove marking
7.4	Identification plate marking
7.5	Weld fabrication marking
8	Testing and inspection
8.1	Pressure tests
8.1.1	General
8.1.2	Shell test
8.1.3	Closure leakage test

- 8.1.4 Optional closure leakage test for gate valves
- 8.1.5 Backseat leakage test
- 8.1.6 Fugitive emission testing
- 8.2 Inspection

9 Preparation for despatch

Annex A (normative) Requirements for extended body gate valve bodies

- A.1 General
- A.2 Applicability
- A.3 Body configuration
 - A.3.1 Extension length
 - A.3.2 Extensions having threaded ends
 - A.3.3 Extensions having welding ends
- A.4 Materials for extensions
- A.5 Body extension construction
- A.6 Marking

Annex B (normative) Requirements for valves with bellows stem seals

- B.1 General
- B.2 Design
- B.3 Pressure–temperature ratings
- B.4 Extensions for bellows enclosure
- B.5 Type testing
- B.6 Bellows and bellows assembly materials
- B.7 Pressure tests
- B.8 Marking
- B.9 Preparation for despatch

Annex C (normative) Type testing of bellows stem seals

- C.1 General
- C.2 General requirements
- C.3 Test procedure
 - C.3.1 Pre-test examination
 - C.3.2 Pressure test
 - C.3.3 Cycle test
 - C.3.4 Post test examination
- C.4 Acceptability
- C.5 Test report

Annex D (informative) Identification of valve parts

Annex E (informative) Information to be specified by the purchaser

Annex F (informative) Valve material combinations