

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