

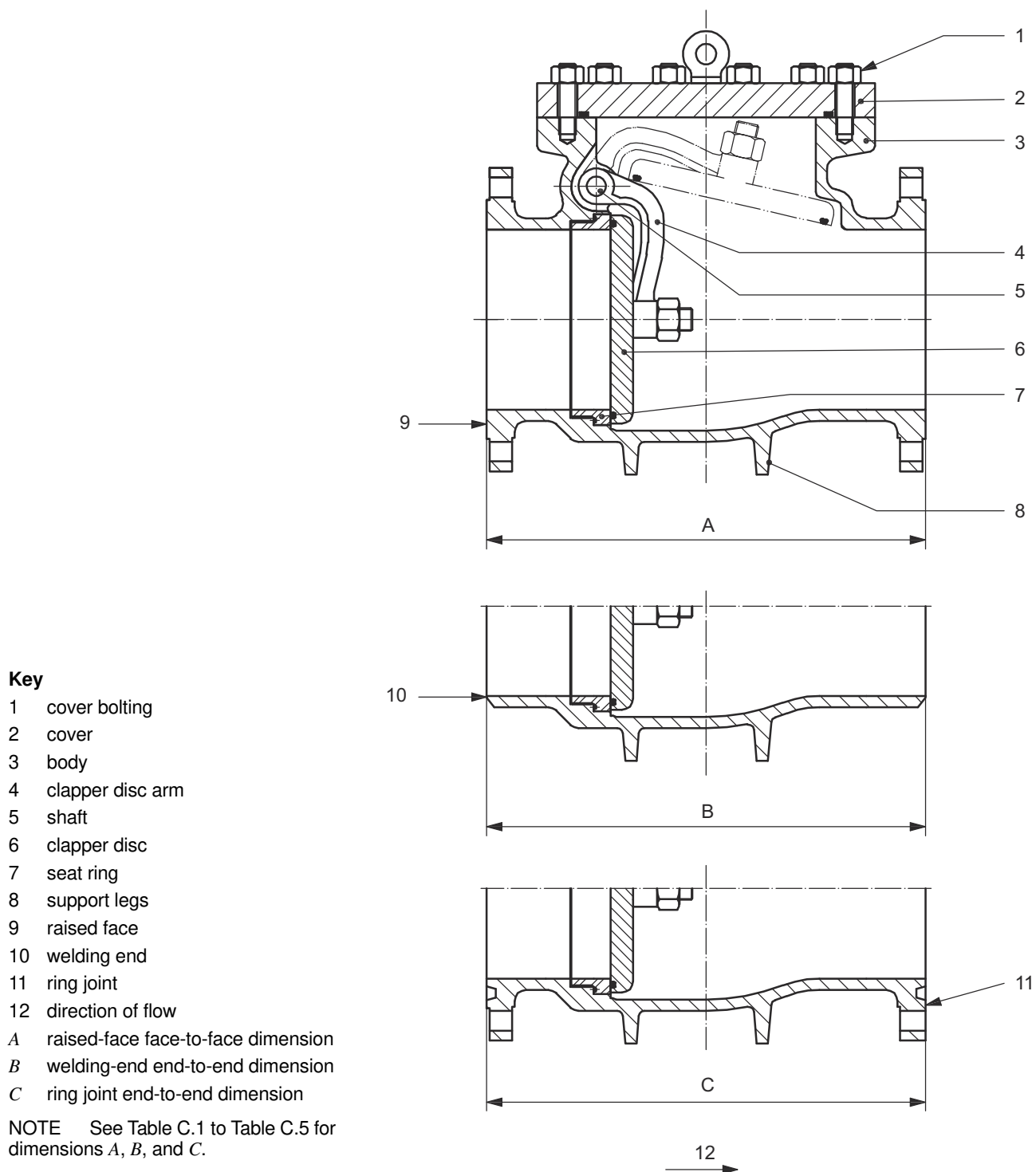
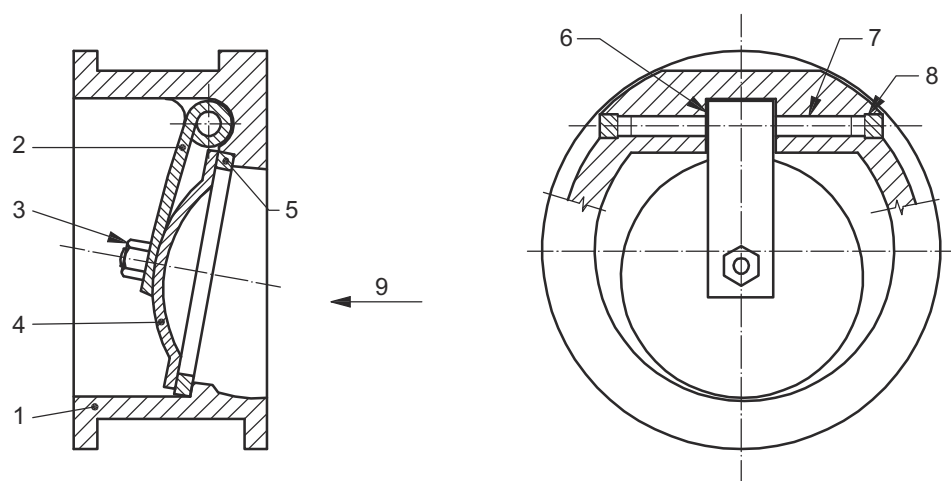


Figure B.8—Full-opening Swing Check Valve

**Key**

- 1 body
- 2 hinge
- 3 nut
- 4 closure plate/stud assembly
- 5 seat ring
- 6 bearing spacers
- 7 hinge pin
- 8 hinge pin retainers
- 9 direction of flow

Figure B.9—Single-plate Wafer-type Check Valve, Long Pattern

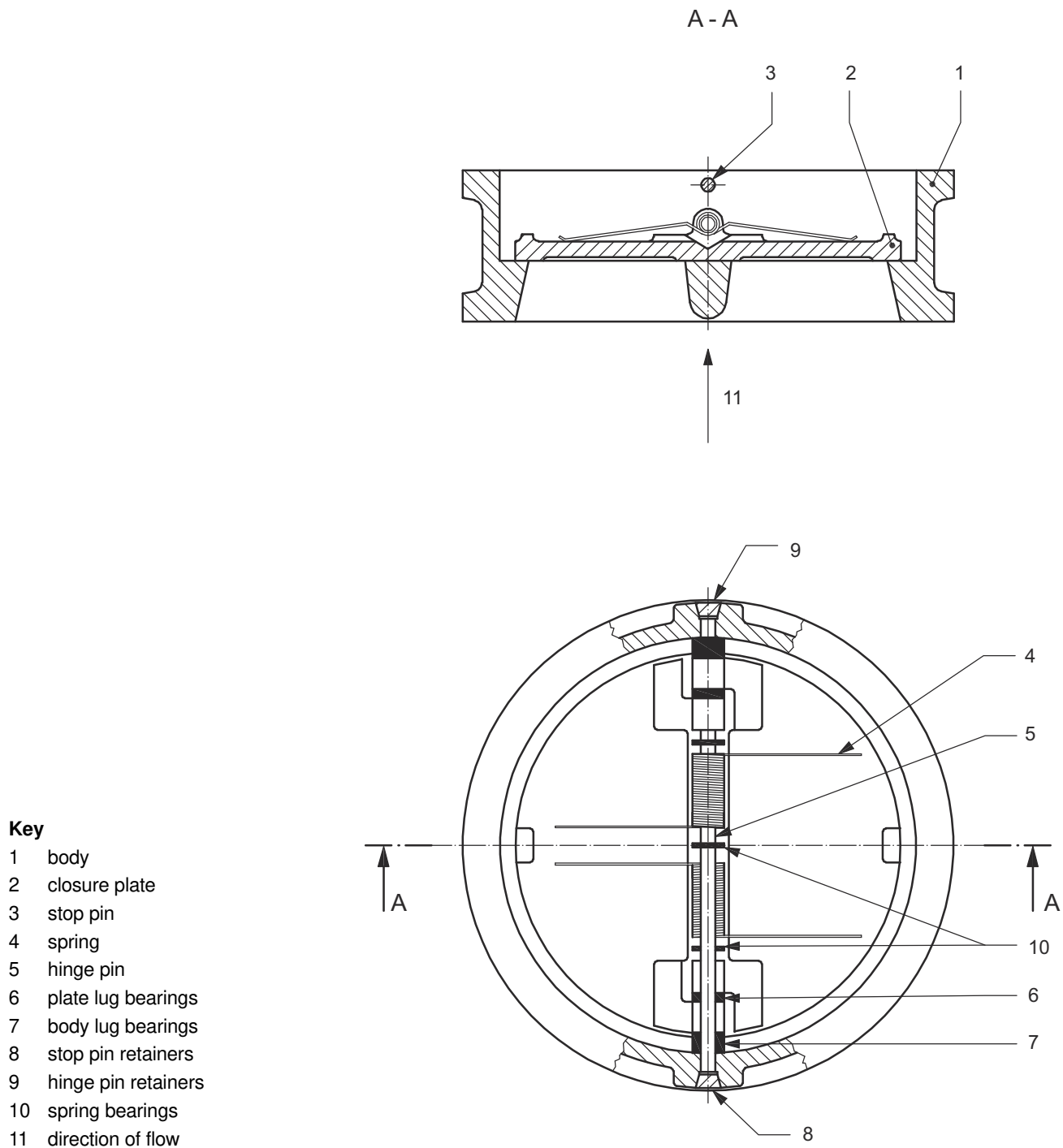
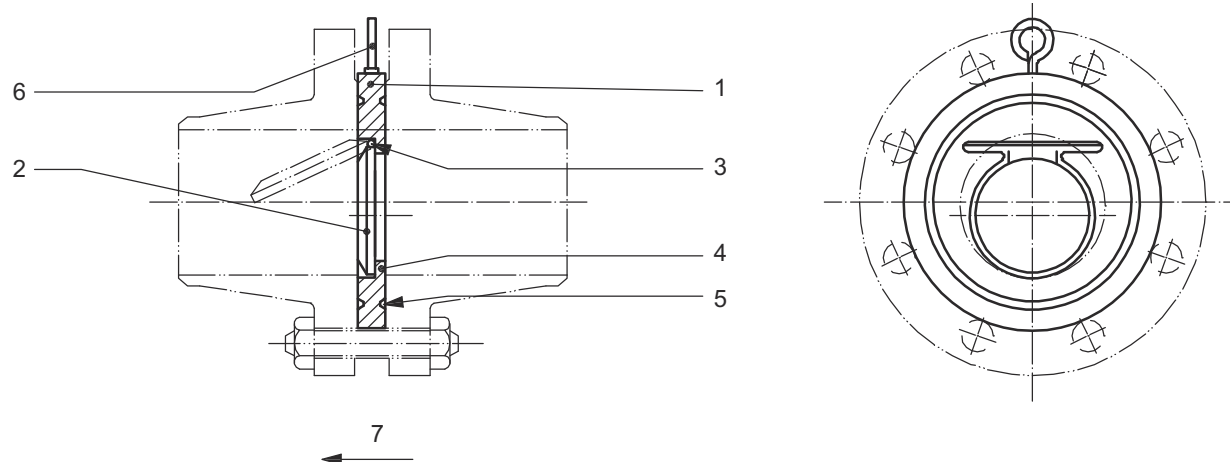


Figure B.10—Typical Dual-plate Wafer-type Check Valve, Long Pattern

**Key**

- 1 body
- 2 clapper
- 3 pin
- 4 clapper seal
- 5 body seal
- 6 lifting eye
- 7 direction of flow

Figure B.11—Single-plate Wafer-type Check Valve, Short Pattern

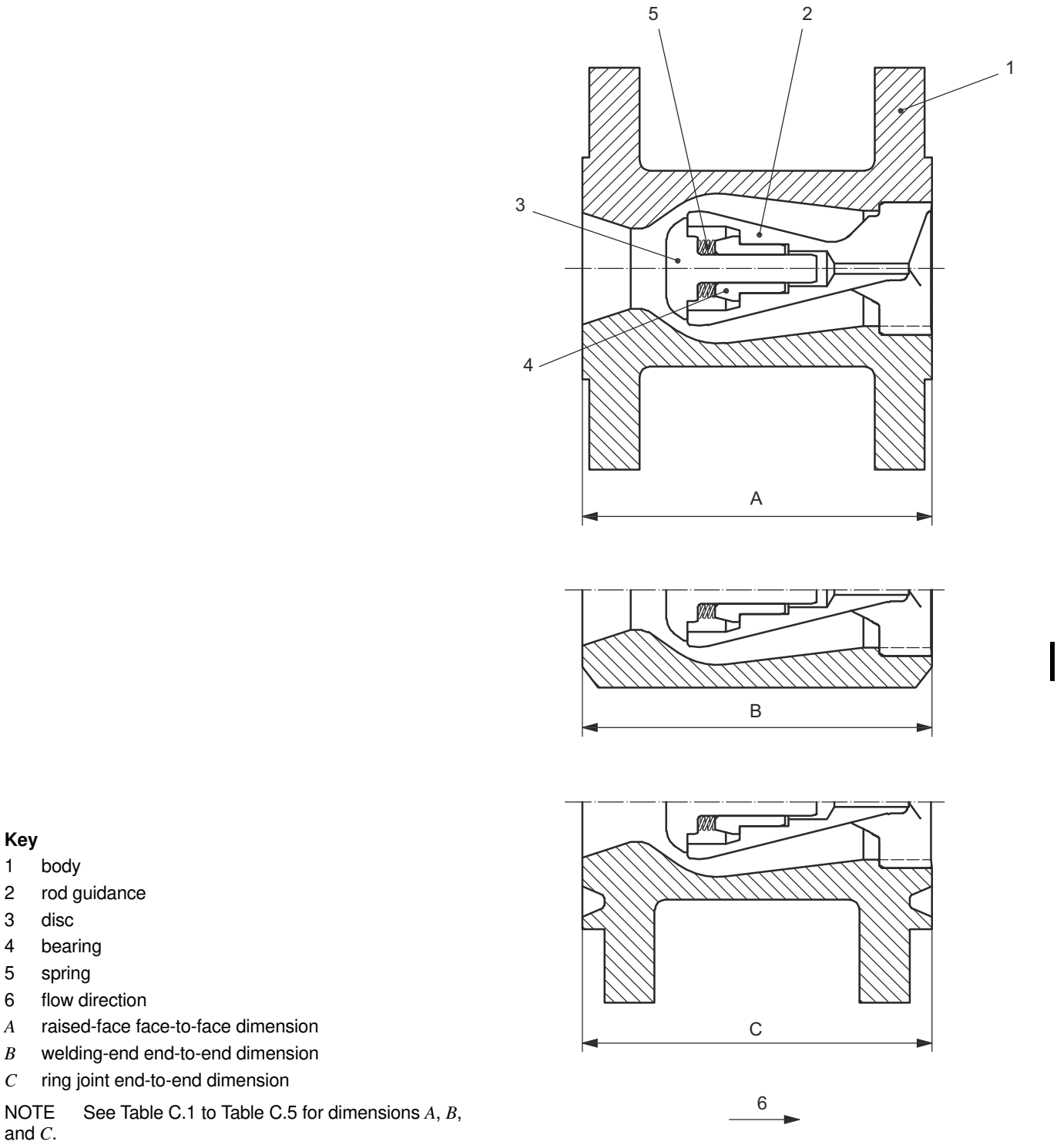


Figure B.12—Axial Flow Check Valve

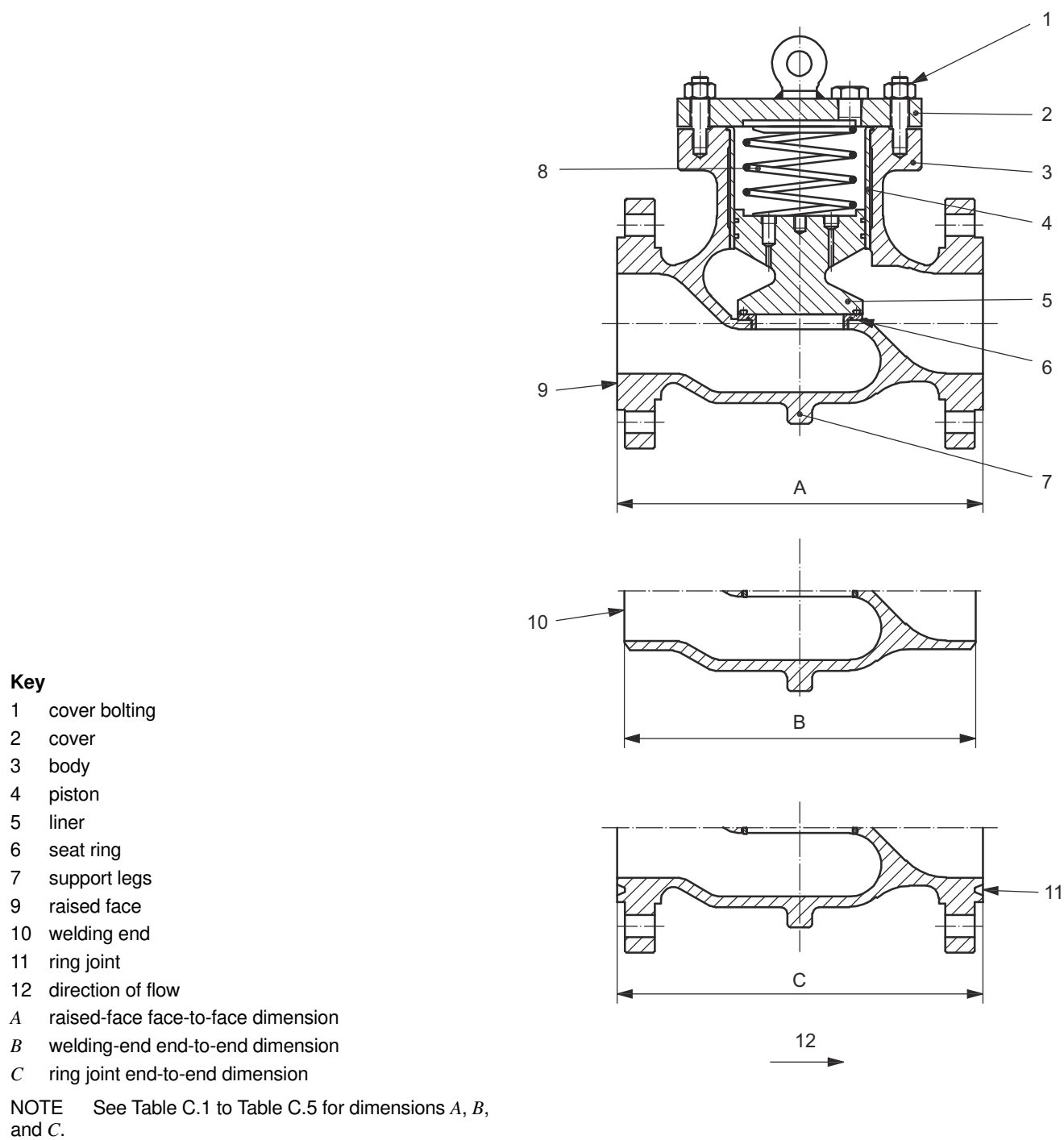
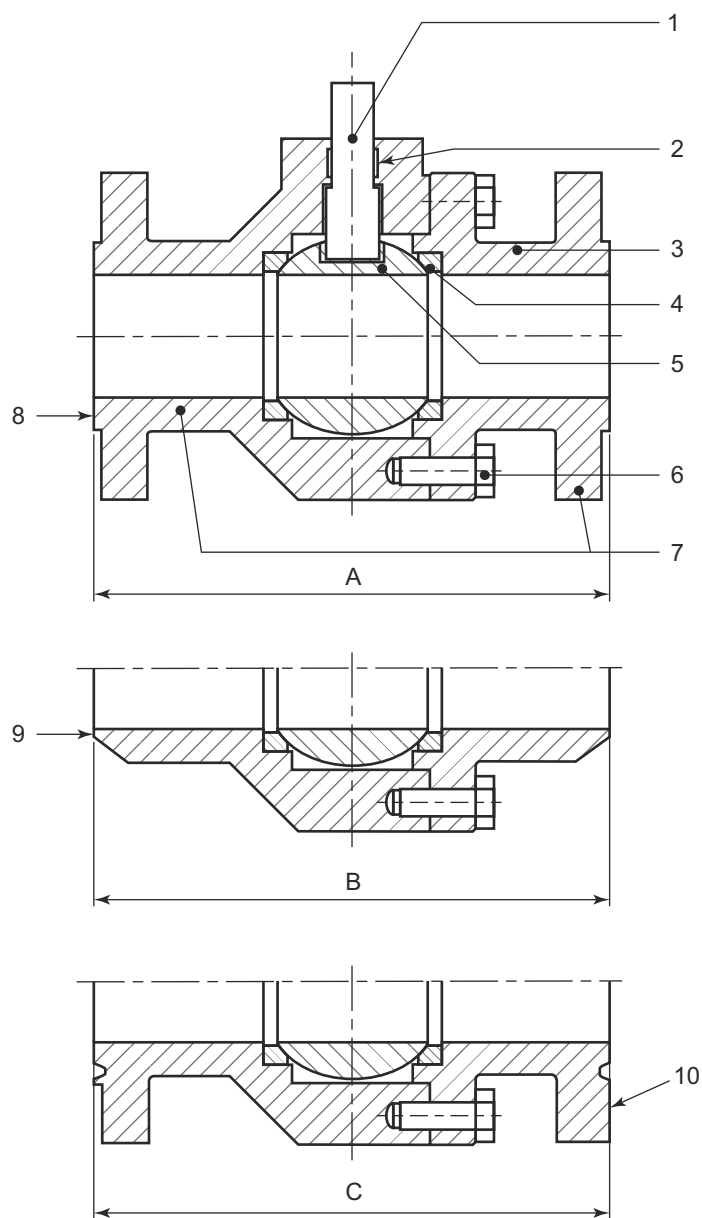


Figure B.13—Piston Check Valve

**Key**

- 1 stem
- 2 stem seal
- 3 body
- 4 seat ring
- 5 ball
- 6 body bolting
- 7 end connector
- 8 raised face
- 9 welding end
- 10 ring joint

A raised-face face-to-face dimension

B welding-end end-to-end dimension

C ring joint end-to-end dimension

NOTE See Table C.1 to Table C.5 for dimensions *A*, *B*, and *C*.

Figure B.14—Floating Ball Valve

Annex C

(normative)

Valve End-to-end and Face-to-face Dimensions

This annex shows valve end-to-end and face-to-face dimensions for gate, plug, ball, and check valves with raised face, welding end, and ring joint.

Table C.1—Gate Valves-Face-to-face (A) and End-to-end (B and C) Dimensions

Table C.2—Plug valves-Face-to-face (A) and End-to-end (B and C) Dimensions

Table C.3—Ball Valves-Face-to-face (A) and End-to-end (B and C) Dimensions

Table C.4—Check Valves, Full Opening and Reduced Types-Face-to-face (A) and End-to-end (B and C) Dimensions

Table C.5—Single- and Dual-plate, Long- and Short-pattern, Wafer-type Check Valves-Face-to-face Dimensions

Table C.1—Gate Valves—Face-to-face (*A*) and End-to-end (*B* and *C*) Dimensions

Dimensions in inches (millimeters)

NPS	DN	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>
		Class 150			Class 300		
2	50	7.00 (178)	8.50 (216)	7.50 (191)	8.50 (216)	8.50 (216)	9.13 (232)
2 1/2	65	7.50 (191)	9.50 (241)	8.00 (203)	9.50 (241)	9.50 (241)	10.13 (257)
3	80	8.00 (203)	11.13 (283)	8.50 (216)	11.13 (283)	11.13 (283)	11.75 (298)
4	100	9.00 (229)	12.00 (305)	9.50 (241)	12.00 (305)	12.00 (305)	12.63 (321)
6	150	10.50 (267)	15.88 (403)	11.00 (279)	15.88 (403)	15.88 (403)	16.50 (419)
8	200	11.50 (292)	16.50 (419)	12.00 (305)	16.50 (419)	16.50 (419)	17.13 (435)
10	250	13.00 (330)	18.00 (457)	13.50 (343)	18.00 (457)	18.00 (457)	18.63 (473)
12	300	14.00 (356)	19.75 (502)	14.50 (368)	19.75 (502)	19.75 (502)	20.38 (518)
14	350	15.00 (381)	22.50 (572)	15.50 (394)	30.00 (762)	30.00 (762)	30.63 (778)
16	400	16.00 (406)	24.00 (610)	16.50 (419)	33.00 (838)	33.00 (838)	33.63 (854)
18	450	17.00 (432)	26.00 (660)	17.50 (445)	36.00 (914)	36.00 (914)	36.63 (930)
20	500	18.00 (457)	28.00 (711)	18.50 (470)	39.00 (991)	39.00 (991)	39.75 (1010)
22	550	—	—	—	43.00 (1092)	43.00 (1092)	43.88 (1114)
24	600	20.00 (508)	32.00 (813)	20.50 (521)	45.00 (1143)	45.00 (1143)	45.88 (1165)
26	650	22.00 (559)	34.00 (864)	—	49.00 (1245)	49.00 (1245)	50.00 (1270)
28	700	24.00 (610)	36.00 (914)	—	53.00 (1346)	53.00 (1346)	54.00 (1372)
30	750	24.00 (610) ^a	36.00 (914)	—	55.00 (1397)	55.00 (1397)	56.00 (1422)
32	800	28.00 (711)	38.00 (965)	—	60.00 (1524)	60.00 (1524)	61.13 (1553)
34	850	30.00 (762)	40.00 (1016)	—	64.00 (1626)	64.00 (1626)	65.13 (1654)
36	900	28.00 (711) ^b	40.00 (1016)	—	68.00 (1727)	68.00 (1727)	69.13 (1756)

Table C.1—Gate Valves—Face-to-face (*A*) and End-to-end (*B* and *C*) Dimensions (Continued)

Dimensions in inches (millimeters)

NPS	DN	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>
		Class 400			Class 600		
2	50	11.50 (292)	11.50 (292)	11.63 (295)	11.50 (292)	11.50 (292)	11.63 (295)
2 1/2	65	13.00 (330)	13.00 (330)	13.13 (333)	13.00 (330)	13.00 (330)	13.13 (333)
3	80	14.00 (356)	14.00 (356)	14.13 (359)	14.00 (356)	14.00 (356)	14.13 (359)
4	100	16.00 (406)	16.00 (406)	16.13 (410)	17.00 (432)	17.00 (432)	17.13 (435)
6	150	19.50 (495)	19.50 (495)	19.63 (498)	22.00 (559)	22.00 (559)	22.13 (562)
8	200	23.50 (597)	23.50 (597)	23.63 (600)	26.00 (660)	26.00 (660)	26.13 (664)
10	250	26.50 (673)	26.50 (673)	26.63 (676)	31.00 (787)	31.00 (787)	31.13 (791)
12	300	30.00 (762)	30.00 (762)	30.13 (765)	33.00 (838)	33.00 (838)	33.13 (841)
14	350	32.50 (826)	32.50 (826)	32.63 (829)	35.00 (889)	35.00 (889)	35.13 (892)
16	400	35.50 (902)	35.50 (902)	35.63 (905)	39.00 (991)	39.00 (991)	39.13 (994)
18	450	38.50 (978)	38.50 (978)	38.63 (981)	43.00 (1092)	43.00 (1092)	43.13 (1095)
20	500	41.50 (1054)	41.50 (1054)	41.75 (1060)	47.00 (1194)	47.00 (1194)	47.25 (1200)
22	550	45.00 (1143)	45.00 (1143)	45.38 (1153)	51.00 (1295)	51.00 (1295)	51.38 (1305)
24	600	48.50 (1232)	48.50 (1232)	48.88 (1241)	55.00 (1397)	55.00 (1397)	55.38 (1407)
26	650	51.50 (1308)	51.50 (1308)	52.00 (1321)	57.00 (1448)	57.00 (1448)	57.50 (1461)
28	700	55.00 (1397)	55.00 (1397)	55.50 (1410)	61.00 (1549)	61.00 (1549)	61.50 (1562)
30	750	60.00 (1524)	60.00 (1524)	60.50 (1537)	65.00 (1651)	65.00 (1651)	65.50 (1664)
32	800	65.00 (1651)	65.00 (1651)	65.63 (1667)	70.00 (1778)	70.00 (1778)	70.63 (1794)
34	850	70.00 (1778)	70.00 (1778)	70.63 (1794)	76.00 (1930)	76.00 (1930)	76.63 (1946)
36	900	74.00 (1880)	74.00 (1880)	74.63 (1895)	82.00 (2083)	82.00 (2083)	82.63 (2099)

Table C.1—Gate Valves—Face-to-face (*A*) and End-to-end (*B* and *C*) Dimensions (Continued)

Dimensions in inches (millimeters)

NPS	DN	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>	Raised Face <i>A</i>	Welding End <i>B</i>	Ring Joint <i>C</i>
		Class 900			Class 1500		
2	50	14.50 (368)	14.50 (368)	14.63 (371)	14.50 (368)	14.50 (368)	14.63 (371)
2 1/2	65	16.50 (419)	16.50 (419)	16.63 (422)	16.50 (419)	16.50 (419)	16.63 (422)
3	80	15.00 (381)	15.00 (381)	15.13 (384)	18.50 (470)	18.50 (470)	18.63 (473)
4	100	18.00 (457)	18.00 (457)	18.13 (460)	21.50 (546)	21.50 (546)	21.63 (549)
6	150	24.00 (610)	24.00 (610)	24.13 (613)	27.75 (705)	27.75 (705)	28.00 (711)
8	200	29.00 (737)	29.00 (737)	29.13 (740)	32.75 (832)	32.75 (832)	33.13 (841)
10	250	33.00 (838)	33.00 (838)	33.13 (841)	39.00 (991)	39.00 (991)	39.38 (1000)
12	300	38.00 (965)	38.00 (965)	38.13 (968)	44.50 (1130)	44.50 (1130)	45.13 (1146)
14	350	40.50 (1029)	40.50 (1029)	40.88 (1038)	49.50 (1257)	49.50 (1257)	50.25 (1276)
16	400	44.50 (1130)	44.50 (1130)	44.88 (1140)	54.50 (1384)	54.50 (1384)	55.38 (1407)
18	450	48.00 (1219)	48.00 (1219)	48.50 (1232)	60.50 (1537)	60.50 (1537)	61.38 (1559)
20	500	52.00 (1321)	52.00 (1321)	52.50 (1334)	65.50 (1664)	65.50 (1664)	66.38 (1686)
22	550	—	—	—	—	—	—
24	60	61.00 (1549)	61.00 (1549)	61.75 (1568)	76.50 (1943)	76.50 (1943)	77.63 (1972)