Bronze Gate Valve Features



Detailed Features

Crane gate valves offer the ultimate in dependable service wherever minimum pressure drop is important. They serve as efficient stop valves with fluid flow in either direction. Gate valves are best for services that require infrequent valve operation and where the disc is kept either in the fully opened or fully closed position.

FEATURES AND BENEFITS

The Crane gate valve design provides the following benefits to the user:

- · Streamlined design has eliminated sharp body contours while providing maximum strength without added weight.
- · Body design increases the resistance to shock and distortion.
- · Body design reinforces seat against the wedging action to the disc.
- · Wide-faced hexagon ends provide a firm wrench grip and help to prevent damage to the valve.

Other design features have been incorporated into our gate valves, making Crane one of the most trusted valve manufacturers in the myriad of industries we serve.

BONNET OPTIONS

Screwed Bonnets

Screwed bonnets have optimum sized hexagons for easy and positive wrench grip. To ensure a leak tight joint and to provide high unit loading with minimal torque, the flat bonnet sealing face contacts on the 5 degree inclined face of the body.

One Piece Bonnets

One piece bonnets are compact in design, maintain a tight joint and allow easy dismantle.

Union Bonnets

Union bonnets are supplied with optimum sized hexagon shaped, high tensile bronze rings to provide a leak-tight joint for maximum security under pressure. It also simplifies inspection of the valve interior.

STEM OPTIONS

Rising Stems

Rising stems provide positive indication of the disc position.

Non-Rising Stems

Valves provided with non-rising stems are ideal for applications where space is limited.

WEDGE OPTIONS

Solid Wedge Discs

The single piece design is ideal for a variety of applications, particularly for conditions of severe turbulence. Discs are reversible in the body and machined to provide for smooth operation. Accurate guiding throughout its travel prevents disc-to-seal contact until the point of closure, thus minimizing seat wear.

VALVE SEAT COMPONENTS

Back Seat

All Crane gate valves are provided with a back seat which can be used as an indication of valve position. For normal operation, the stem should be backed off so that the back seat is not in contact. This permits the stem packing to assume its intended sealing function. In the unlikely event of stem packing leakage, the back seat can be used to stop the leakage until the packing can be replaced. Packing replacement should not be undertaken while the valve is under pressure as it represents a safety hazard.

Stainless Steel Seat Rings

Stainless steel (AISI 410) seat rings provide high resistance to wear, temperature, galling and scoring. Normal seating wear is absorbed by the disc which can be easily replaced.

END OPTIONS

Flanged Ends

Valves supplied with flanged ends conform to ASME B16.24 (Class 150). Flanges are plain faced with two V-Shaped concentric grooves between the port and bolt holes.

Threaded Ends

Valves supplied with threaded ends conform to ASME B1.20.1

Solder Joint Ends

Valves supplied with solder joint ends comply with ASME B16.18.

PACKING

Packing

Graphite composition packing provides a tight seal.

HEAT DISPENSING HANDWHEELS

Standard Handwheel

The open rim, multi-rib design provides easy manual operation. Handles are sized to provide adequate torque to operate the valve without the aid of levers, hickeys or wrenches.

MARKING

Identification Plate

Each valve is identified and marked in accordance with industry standard MSS SP-25. The identification plate is located under the handwheel nut permitting easy field reference

INDUSTRY STANDARDS AND APPROVALS

Depending on design, the following specifications and standard are also applicable to Crane gate valves. See individual catalogs for specific standard/specification compliance.

Design Specifications for Bronze Gate Valves

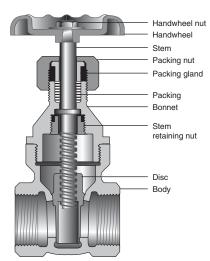
- MSS SP-80
- ASME B16.10, Class 125 for face-to-face dimensions
- ASME B16.24, Class 150 for flanged valves
- ASME B16.118 for solder joint ends

Approvals:

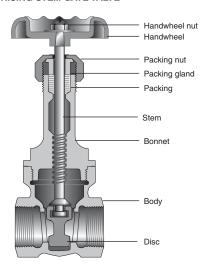
ULC Listed

CAUTION: Gate valves are not recommended for throttling service since flow against a partially opened disc may cause vibration or chattering, resulting in damage to the seating surfaces of the valve.

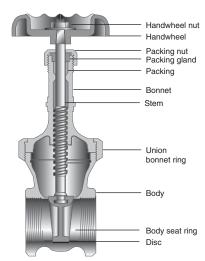
NON-RISING STEM GATE VALVE



RISING STEM GATE VALVE



UNION BONNET GATE VALVE





Class 125 • Threaded Bonnet • Rising Stem • Threaded Ends

Figure 428 Size Range:

1/4" through 3"

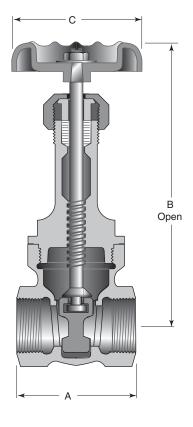
Working Pressures Non-Shock:

125 psi Steam, Basic Rating 200 psi Cold Working Pressure

Features

- Rising Stem
- Screwed Bonnet
- Solid Wedge Disc
- Back Seat
- Full Ports
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.



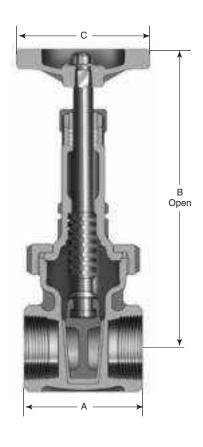
Principal Parts & Materials

Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/4"-2"	Bronze	B505 alloy C83600
Stem	2 ½"-3"	Bronze	B371 alloy C69400

	½	³/ ₈	½	³ ⁄ ₄	1	1 ¼	1 ½	2	2 ½	3
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	1.65	1.65	2.04	2.15	2.47	2.77	2.85	3.25	4.24	4.61
	(42)	(42)	(52)	(55)	(63)	(70)	(72)	(83)	(108)	(117)
В	4.92	4.92	5.07	6.24	7.43	8.58	9.67	11.81	14.77	16.63
	(125)	(125)	(129)	(158)	(189)	(218)	(246)	(300)	(375)	(422)
С	2.13	2.13	2.57	2.57	2.75	3.08	3.64	3.65	5.24	5.24
	(54)	(54)	(65)	(65)	(70)	(78)	(92)	(93)	(133)	(133)
WTS.	0.05 (0.22)	0.05 (0.22)	0.09 (0.41)	1.40 (0.61)	2.00 (0.91)	3.10 (1.41)	4.20 (1.91)	6.70 (3.02)	12.60 (5.69)	19.00 (8.60)



Class 125 • Union Bonnet • Rising Stem • Threaded Ends



Features

- Rising Stem
- Union Bonnet
- Solid Wedge Disc
- **Back Seat**
- Full Ports
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 428UB Size Range:

1/4" through 3"

Working Pressures Non-Shock:

125 psi Steam, Basic Rating 200 psi Cold Working Pressure

Principal Parts & Materials

Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/4"-2"	Bronze	B62 alloy C83600
Stem	2 ½"-3"	Cu-Si Bronze	B371 alloy C69400

	½ (6)	³/ ₈ (10)	½ (15)	³ ⁄ ₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.81	1.81	1.98	2.14	2.46	2.77	2.85	3.25	4.25	4.59
, ,	(46)	(46)	(51)	(55)	(63)	(71)	(73)	(83)	(108)	(117)
В	4.96	4.96	5.07	6.25	7.44	8.62	9.68	11.85	14.53	16.39
	(126)	(126)	(129)	(159)	(189)	(219)	(246)	(301)	(369)	(416)
С	2.25	2.25	2.75	2.75	2.75	3.25	4.00	4.00	4.75	5.50
	(57)	(57)	(70)	(70)	(70)	(83)	(102)	(102)	(121)	(140)
WTS.	0.90	0.90	1.50	2.30	3.40	5.10	7.20	11.90	13.10	20.10
	(0.41)	(0.41)	(0.67)	(1.03)	(1.54)	(2.31)	(3.28)	(5.40)	(5.94)	(9.12)

Class 125 • Threaded Bonnet • Non-Rising Stem • Threaded Ends

Figure 438 Size Range:

1/4" through 3"

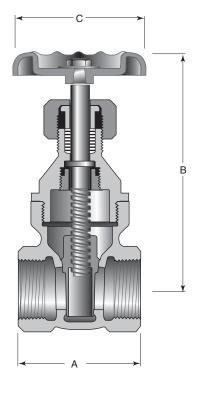
Working Pressures Non-Shock:

125 psi Steam, Basic Rating 200 psi Cold Working Pressure

Features

- · Non-Rising Stem
- Screwed Bonnet
- Threaded Ends
- Solid Wedge Disc
- Full Ports
- Integral Bronze Seat
- Back seat
- MSS SP-80, Type 1

For more detailed features, refer to page 18.



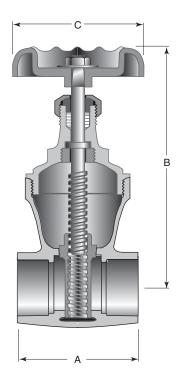
Principal Parts & Materials

Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/4"-2"	Bronze	B505 alloy C83600
Stem	2 ½"-3"	Bronze	B371 alloy C69400

	½ (6)	³/ ₈ (10)	½ (15)	³ ⁄ ₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.65 (42)	1.65 (42)	2.02 (51)	2.14 (54)	2.46 (63)	2.77 (70)	2.85 (72)	3.24 (82)	4.20 (107)	4.65 (118)
В	2.95 (75)	2.95 (75)	3.23 (82)	4.18 (106)	4.73 (120)	5.62 (143)	6.53 (166)	7.35 (187)	9.20 (234)	10.13 (257)
С	2.56 (65)	2.56 (65)	2.06 (52)	2.56 (65)	2.75 (70)	3.08 (78)	3.62 (92)	4.00 (102)	5.22 (133)	5.22 (133)
WTS.	0.5 (0.22)	0.5 (0.22)	0.7 (0.32)	1.3 (0.56)	1.8 (0.79)	3.0 (1.34)	3.7 (1.66)	5.7 (2.59)	12.4 (5.60)	17.7 (8.00)



300 CWP • Threaded Bonnet • Non-Rising Stem • Solder Ends



Features

- Non-Rising Stem
- Screwed Bonnet
- Solid Wedge Disc
- · Solder joint ends
- Full Ports
- Back Seat
- Integral Bronze Seat
- MSS SP-80, Type 1

For more detailed features, refer to page 18.

CAUTION: Before installing solder joint valves, be sure solder or brazing alloy melting point is high enough to withstand line pressure temperature conditions and is compatible with fluid medium. See page 5 for adjusted pressure/temperature ratings.

Figure 1324 Size Range:

1/2" through 3"

Working Pressures Non-Shock:

300 psi Cold Working Pressure

Principal Parts & Materials

Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/2"-2"	Bronze	B505 alloy C83600
Stem	2 ½"-3"	Bronze	B371 alloy C69400

	1/2	3/4	1	1 1/4	1 ½	2	2 1/2	3
	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	1.88	2.41	2.91	3.11	3.47	4.12	5.00	6.00
^	(48)	(61)	(74)	(79)	(88)	(105)	(127)	(152)
В	3.24	4.22	5.04	5.64	6.48	7.39	9.20	10.08
	(82)	(107)	(128)	(143)	(165)	(188)	(234)	(256)
С	2.08	2.57	2.97	3.08	3.64	4.00	5.24	5.24
	(53)	(65)	(75)	(78)	(92)	(102)	(133)	(133)
WTS.	0.70	1.20	2.40	2.50	3.60	5.40	12.00	16.80
	(0.29)	(0.52)	(1.09)	(1.13)	(1.63)	(2.45)	(5.44)	(7.62)



Class 150 • Threaded Bonnet • Rising Stem • Threaded Ends

Figure 431 Solid Wedge Disc Size Range:

1/4" through 3"

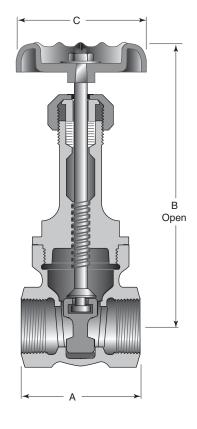
Working Pressures Non-Shock:

150 psi Steam, Basic Rating300 psi Cold Working Pressure

Features

- Rising Stem
- Screwed Bonnet
- Threaded Ends
- Full Ports
- · Back Seat
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.



Principal Parts & Materials

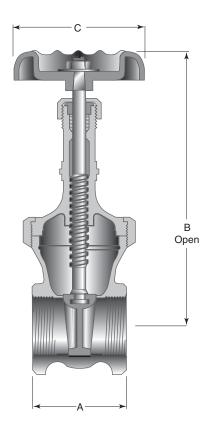
Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/2"-2"	Bronze	B505 alloy C83600
Stem	1/4"-3/8", 2 1/2"-3"	Bronze	B371 alloy C69400

Dimensions and Weights

	½ (6)	³/ ₈ (10)	½ (15)	³⁄₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.80	1.68	2.02	2.14	2.46	2.77	2.85	3.25	4.25	4.61
, ,	(46)	(43)	(51)	(54)	(62)	(70)	(72)	(83)	(108)	(117)
В	4.78	4.93	4.98	6.28	7.44	8.49	9.77	11.98	14.93	16.83
	(121)	(125)	(127)	(160)	(189)	(216)	(248)	(304)	(379)	(427)
С	1.77	2.05	2.08	2.57	2.76	3.08	3.65	4.06	5.26	5.26
	(45)	(52)	(53)	(65)	(70)	(78)	(93)	(103)	(134)	(134)
WTS.	0.80	0.80	0.90	1.40	2.00	3.30	4.20	6.70	12.80	18.50
	(0.36)	(0.36)	(0.39)	(0.64)	(0.91)	(1.47)	(1.91)	(3.02)	(5.81)	(8.39)



Class 150 • Union Bonnet • Rising Stem • Threaded Ends



Features

- Rising Stem
- Union Bonnet
- Solid Wedge Disc
- Threaded Ends
- Full Ports
- Back Seat
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 431UB Size Range:

1/4" through 3"

Working Pressures Non-Shock:

150 psi Steam, Basic Rating 300 Cold Working Pressure

Principal Parts & Materials

Part	Size	Material	ASTM
Body & Union bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/4"-2"	Bronze	B505 alloy C83600
Stem	2 ½"–3"	Bronze	B371 alloy C69400

	1/4	3/ ₈	1/2	3/4	1	1 1/4	1 ½	2	2 ½	3
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	1.64	1.64	2.03	2.14	2.46	2.78	2.85	3.25	4.24	4.63
,,	(42)	(42)	(52)	(54)	(62)	(71)	(72)	(83)	(108)	(118)
В	4.84	4.84	4.98	6.29	7.39	8.57	9.68	11.89	14.86	17.02
	(123)	(123)	(126)	(160)	(188)	(218)	(246)	(302)	(377)	(432)
С	2.06	2.06	2.08	2.57	2.76	3.08	3.64	4.00	5.24	5.24
	(52)	(52)	(53)	(65)	(70)	(78)	(92)	(102)	(133)	(133)
WTS.	0.90	0.90	0.90	1.50	2.40	3.60	4.90	7.50	14.00	20.70
	(0.41)	(0.39)	(0.41)	(0.68)	(1.07)	(1.63)	(2.22)	(3.40)	(6.35)	(9.37)

Class 150 • Threaded Bonnet • Non-Rising Stem • Threaded Ends

Figure 437 Size Range:

1/4" through 3"

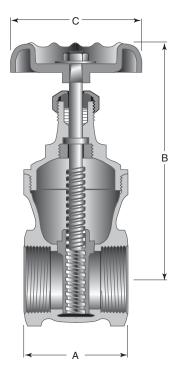
Working Pressures Non-Shock:

150 psi Steam, Basic Rating300 psi Cold Working Pressure

Features

- Non-Rising Stem
- Screwed Bonnet
- Solid Wedge Disc
- Threaded Ends
- Full Ports
- Back Seat
- Integral Bronze Seat
- MSS SP-80, Type 1

For more detailed features, refer to page 18.



Principal Parts & Materials

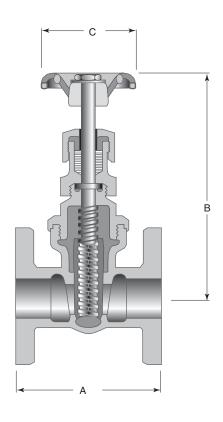
Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/2"-2"	Bronze	B505 alloy C83600
Stem	1/4"-3/8", 2 1/2"-3"	Bronze	B371 alloy C69400

Dimensions and Weights

	½ (6)	³/ ₈ (10)	½ (15)	³ ⁄ ₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.64	1.65	2.02	2.14	2.46	2.77	2.85	3.24	4.20	4.65
, ,	(42)	(42)	(51)	(54)	(63)	(70)	(72)	(82)	(107)	(118)
В	3.65	3.70	3.23	4.18	4.73	5.62	6.53	7.35	9.20	10.13
_	(98)	(94)	(82)	(106)	(120)	(143)	(166)	(187)	(234)	(257)
С	2.06	2.06	2.06	2.56	2.75	3.08	3.62	4.00	5.22	5.22
	(52)	(52)	(52)	(65)	(70)	(78)	(92)	(102)	(133)	(133)
WTS.	0.80	0.80	0.80	1.30	1.80	3.00	3.70	5.70	12.40	17.70
	(0.34)	(0.34)	(0.32)	(0.56)	(0.79)	(1.34)	(1.66)	(2.59)	(5.60)	(8.00)



Class 150 • Threaded Bonnet • Non-Rising Stem • Flanged Ends



Features

- Screwed Bonnet
- Solid Wedge Disc
- Flanged Ends are plain faced with two V-shaped concentric grooves between the port and bolt holes.
- Full Ports
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 429 Size Range:

1" through 3"

Working Pressures Non-Shock:

150 psi Steam, Basic Rating 225 psi Cold Working Pressure

Principal Parts & Materials

Part	Material	ASTM
Body & bonnet	Bronze	B62 alloy C83600
Disc	Bronze	B62 alloy C83600
Stem	Bronze	B371 alloy C69400

	1	1 1/4	1 ½	2	2 ½	3
	(25)	(32)	(40)	(50)	(65)	(80)
Α	3.94	4.33	4.72	5.32	6.50	7.28
7.	(100)	(110)	(120)	(135)	(165)	(185)
В	4.88	5.71	6.50	7.44	9.19	10.38
	(1.24)	(145)	(165)	(189)	(233)	(264)
С	2.56	2.75	3.06	3.62	4.06	4.75
	(66)	(70)	(78)	(92)	(103)	(121)
WTS.	5.7	6.3	9.00	12.20	18.50	25.50
	(2.6)	(2.85)	(4.06)	(5.51)	(8.36)	(11.52)



200 CWP • Threaded Bonnet • Non-Rising Stem • Solder Ends

Figure 1320 Size Range:

1/2" through 3"

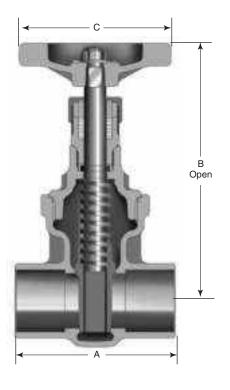
Working Pressures Non-Shock:

150 psi Steam, Basic Rating 200 psi Cold Working Pressure

Features

- Screwed Bonnet
- Solid Wedge Disc
- Solder Joint Ends
- Full Ports
- Integral Bronze Seat
- MSS SP-80, Type 1

For more detailed features, refer to page 18.



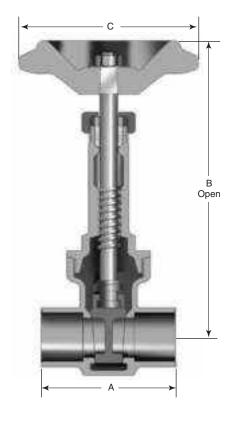
Principal Parts & Materials

Part	Size	Material	ASTM
Body & bonnet	All	Bronze	B62 alloy C83600
Disc	All	Bronze	B62 alloy C83600
Stem	1/2"-2"	Bronze	B62 alloy C83600
Stem	2 ½"-3"	Cu-Si Bronze	B371 alloy C69400

	½ (15)	³ ⁄ ₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.90	2.44	2.91	3.15	3.51	4.17	4.91	5.50
Б	(49) 3.23	(62) 3.74	(74) 4.64	(80) 5.67	(89) 6.53	(106) 7.36	(125) 9.26	(140) 9.89
В	(82)	(95)	(118)	(144)	(166)	(187)	(235)	(251)
С	2.75	2.75	2.75	3.25	4.00	4.00	4.75	5.50
	(70)	(70)	(70)	(83)	(102)	(102)	(121)	(140)
WTS.	0.90	1.40	2.10	2.80	4.40	6.50	12.30	18.30
	(0.31)	(0.49)	(0.77)	(1.08)	(1.54)	(2.45)	(5.22)	(7.39)



200 CWP • Threaded Bonnet • Rising Stem • Solder Ends



Features

- Rising Stem
- Threaded Ends
- Solid Wedge Disc
- Full Ports
- Back Seat
- Integral Bronze Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 1330 Size Range: ½" through 3"

Working Pressures Non-Shock: 200 psi Cold Working Pressure

Principal Parts & Materials

Part	Material	ASTM
Body & bonnet	Bronze	B62 alloy 83600
Disc	Bronze	B62 alloy 83600
Stem	Bronze	B62 alloy 83600

	½ (15)	³⁄₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.89	2.36	2.79	3.15	3.46	4.09	4.72	5.35
	(48)	(60)	(71)	(80)	(88)	(104)	(120)	(136)
В	4.98	5.69	7.21	8.11	9.46	12.06	13.75	16.10
	(126)	(145)	(183)	(206)	(240)	(306)	(349)	(409)
С	2.56	2.75	2.75	3.27	3.27	3.66	4.41	5.19
	(65)	(70)	(70)	(83)	(83)	(93)	(112)	(132)
WTS.	0.70	1.00	1.60	2.70	3.50	5.30	10.70	15.10
	(0.32)	(0.45)	(0.72)	(1.22)	(1.58)	(2.39)	(4.83)	(6.82)

Class 200 • Union Bonnet • Rising Stem • Threaded Ends

Figure 422 Size Range:

1/4" through 3"

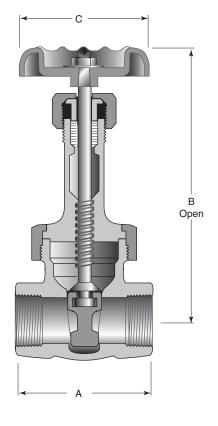
Working Pressures Non-Shock:

200 psi Steam, Basic Rating 400 psi Cold Working Pressure

Features

- Rising Stem
- Union Bonnet
- Solid Wedge Disc
- Threaded Ends
- Full Ports
- Back Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.



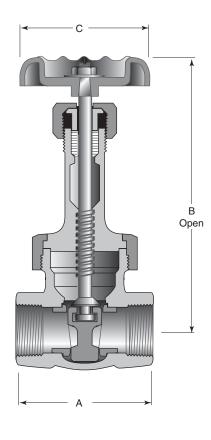
Principal Parts & Materials

Part	Sizes	Material	ASTM
Body & union bonnet	All	Bronze	B61 alloy C92200
Disc	All	Bronze	B61 alloy C92200
Stem	1⁄4" - 2"	Bronze	B505 alloy 83600
Stem	2 ½" - 3	Bronze	B371 alloy 69400

	½ (6)	^{3/} 8 (10)	½ (15)	³ ⁄ ₄ (20)	1 (25)	1 ¼ (32)	1 ½ (40)	2 (50)	2 ½ (65)	3 (80)
Α	1.64	1.64	2.02	2.14	2.46	2.79	2.85	3.25	4.20	4.63
	(42)	(42)	(51)	(54)	(62)	(71)	(72)	(83)	(107)	(118)
В	4.84	4.84	5.06	6.29	7.39	8.56	9.68	11.89	14.80	16.86
	(123)	(123)	(129)	(160)	(188)	(217)	(246)	(302)	(376)	(428)
С	2.06	2.06	2.57	2.57	2.76	3.64	3.64	4.00	5.24	5.50
	(52)	(52)	(65)	(65)	(70)	(92)	(92)	(102)	(133)	(140)
WTS.	0.9	0.9	0.9	1.50	2.40	3.60	4.90	7.50	14.00	21.20
	(0.41)	(0.39)	(0.41)	(0.68)	(1.07)	(1.63)	(2.22)	(3.40)	(6.31)	(9.60)



Class 200 • Union Bonnet • Rising Stem • Stainless Steel Seats • Threaded



Features

- Rising Stem
- Union Bonnet
- Bolted Bonnet (2 1/2" to 3")
- Threaded Ends
- Solid Wedge Disc
- Full Ports
- · Back Seat
- 410 Stainless Steel Seat Rings
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 424 Size Range:

1/4" through 3"

Working Pressures Non-Shock:

200 psi Steam, Basic Rating400 psi Cold Working Pressure

Principal Parts & Dimensions

Part	Material	ASTM
Body, bonnet & union ring	Bronze	B61 alloy C92200
Disc	Bronze	B61 alloy C92200
Seat ring	410 Stainless Steel	A276 S41000
Stem	Bronze	B371 alloy C69400

	1/4	3/8	1/2	3/4	1	1 1/4	1 ½	2	2 ½	3
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	2.03	2.11	2.44	2.61	3.04	3.34	3.67	3.96	4.60	5.67
	(52)	(54)	(62)	(66)	(77)	(85)	(93)	(101)	(117)	(144)
В	4.81	4.85	5.37	6.71	7.77	9.06	10.32	12.50	14.58	16.33
	(122)	(123)	(136)	(170)	(197)	(230)	(262)	(318)	(370)	(415)
С	2.10	2.10	2.48	2.65	2.97	3.25	3.66	4.61	5.25	6.97
	(53)	(53)	(63)	(67)	(75)	(83)	(93)	(117)	(133)	(177)
WTS.	1.00	1.00	1.50	2.10	3.30	5.00	6.00	10.40	19.60	35.30
	(0.45)	(0.45)	(0.68)	(0.95)	(1.50)	(2.27)	(2.72)	(4.72)	(8.89)	(16.01)

Class 200 • Union Bonnet • Non-Rising Stem • Stainless Steel Seats

Figure 426 Size Range:

1/4" through 2"

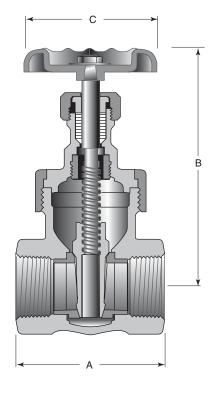
Working Pressures Non-Shock:

200 psi Steam, Basic Rating400 psi Cold Working Pressure

Features

- Non-Rising Stem
- Solid Wedge Disc
- Threaded Ends
- Union Bonnet
- Full Ports
- Back Seat
- 410 Stainless Steel Seat Ring
- MSS SP-80, Type I

For more detailed features, refer to page 18.



Principal Parts & Materials

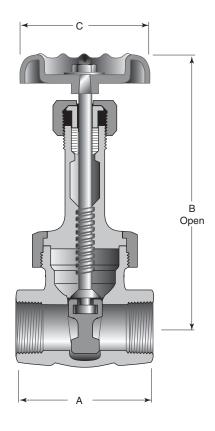
Part	Material	ASTM
Body & bonnet	Bronze	B61 alloy C92200
Disc	Bronze	B61 alloy C92200
Seat ring	410 Stainless Steel	A276 S41000
Stem	Bronze	B371 alloy C69400

Dimensions and Weights

	1/4	3 / 8	1/2	3/4	1	1 1/4	1 ½	2
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)
Α	2.03	2.13	2.47	2.60	3.05	3.38	3.68	3.96
	(52)	(54)	(63)	(66)	(77)	(86)	(93)	(101)
В	3.60	3.51	3.86	4.51	5.05	5.88	6.65	7.76
	(91)	(89)	(98)	(115)	(128)	(149)	(169)	(197)
С	2.05	2.13	2.47	2.63	2.96	3.25	3.68	4.59
	(52)	(54)	(63)	(67)	(75)	(83)	(93)	(117)
WTS.	0.90	0.90	1.40	1.90	3.10	5.00	5.80	10.20
	(0.41)	(0.41)	(0.64)	(0.86)	(1.41)	(2.27)	(2.63)	(4.63)



Class 300 • Union Bonnet • Rising Stem • Threaded Ends



Features

- Rising Stem
- Union Bonnet
- Threaded Ends
- Solid Wedge Disc
- Full Ports
- Back Seat
- MSS SP-80, Type 2

For more detailed features, refer to page 18.

Figure 622E Size Range:

1/4" through 3"

Working Pressures Non-Shock:

300 psi Steam, Basic Rating 1000 psi Cold Working Pressure 1/4" - 3" (6mm - 80mm)

Principal Parts & Materials

Part	Sizes	Material	ASTM
Body & bonnet	All	Bronze	B61 alloy C92200
Disc	All	Bronze	B61 alloy C92200
Stem	1⁄4" - 3"	Bronze	B371 alloy 694

	1/4	3/8	1/2	3/4	1	1 1/4	1 ½	2	2 ½	3
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	1.64	1.64	2.04	2.14	2.47	3.08	3.21	3.39	4.25	4.59
	(42)	(42)	(52)	(54)	(63)	(78)	(82)	(86)	(108)	(117)
В	4.77	4.77	5.48	6.68	7.81	9.26	10.26	12.36	14.53	16.39
	(121)	(121)	(139)	(170)	(199)	(235)	(261)	(313)	(369)	(416)
С	1.75	1.75	2.13	2.71	3.03	3.03	3.72	4.72	5.28	5.28
	(44)	(44)	(54)	(69)	(77)	(77)	(94)	(120)	(134)	(134)
WTS.	0.70	0.70	1.20	1.80	3.00	4.00	5.30	8.70	13.1	20.1
	(0.32)	(0.32)	(0.50)	(0.80)	(1.40)	(1.80)	(2.40)	(3.90)	(6.0)	(9.2)

Class 300 • Union Bonnet • Rising Stem • Stainless Steel Seats • Threaded

Figure 634E Size Range:

1/4" through 3"

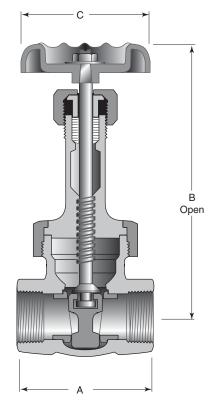
Working Pressures Non-Shock:

300 psi Steam, Basic Rating 1000 psi Cold Working Pressure ½" to 2" - (6mm - 50mm) 600 psi Cold Working Pressure 2½" to 3" - (65mm - 80mm)

Features

- · Rising Stem
- Union Bonnet
- Bolted Bonnet (2 ½" to 3")
- Solid Wedge Disc
- · Threaded Ends
- Full Ports
- Back Seat
- 410 Stainless Steel Seat Rings
- MSS SP-80, Type 2

For more detailed features, refer to page 18.



Principal Parts & Materials

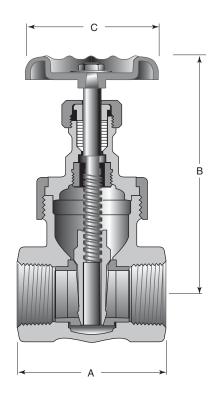
Part	Sizes	Material	ASTM
Body & bonnet	All	Bronze	B61 alloy C92200
Disc	All	Bronze	B61 alloy C92200
Seat ring	All	410 Stainless Steel	A276 S41000
Stem	All	Bronze	B371 alloy C69400

Dimensions and Weights

	1/4	3/8	1/2	3/4	1	1 1/4	1 ½	2	2 ½	3
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)	(65)	(80)
Α	2.03	2.13	2.42	2.61	3.06	3.35	3.69	3.96	4.60	5.63
	(52)	(54)	(61)	(66)	(78)	(85)	(94)	(101)	(117)	(143)
В	4.86	4.86	5.40	6.60	7.91	9.32	10.45	13.38	14.12	16.78
	(123)	(123)	(137)	(168)	(201)	(237)	(265)	(340)	(359)	(426)
С	2.25	2.25	2.25	2.75	2.75	3.25	4.00	4.00	4.75	7.00
	(57)	(57)	(57)	(70)	(70)	(83)	(102)	(102)	(121)	(178)
WTS.	.85	.94	1.44	2.06	3.34	4.81	6.13	10.44	20.50	44.00
	(0.39)	(0.43)	(0.65)	(0.94)	(1.52)	(2.18)	(2.78)	(4.74)	(9.31)	(19.95)



Class 300 • Union Bonnet • Non-Rising Stem • Stainless Steel Seats



Features

- Non-Rising Stem
- Union Bonnet
- Solid Wedge Disc
- Threaded Ends
- Full Ports
- Back Seat
- 410 Stainless Steel Seat Rings
- MSS SP-80, Type I

For more detailed features, refer to page 18.

Figure 636E Size Range:

1/4" through 2"

Working Pressures Non-Shock:

300 psi Steam, Basic Rating 1000 psi Cold Working Pressure 1/4" to 2" - (6mm - 50mm)

Principal Parts & Materials

Part	Material	ASTM
Body & bonnet	Bronze	B61 alloy C92200
Disc	Bronze	B61 alloy C92200
Seat ring	410 Stainless Steel	A276 S41000
Stem	Bronze	B371 alloy C69400

	1/4	3/8	1/2	3/4	1	1 1/4	1 ½	2
	(6)	(10)	(15)	(20)	(25)	(32)	(40)	(50)
Α	2.03	2.13	2.47	2.60	3.05	3.38	3.68	3.96
, ,	(52)	(54)	(63)	(66)	(77)	(86)	(93)	(101)
В	3.60	3.51	3.86	4.51	5.05	5.88	6.65	7.76
_	(91)	(89)	(98)	(115)	(128)	(149)	(169)	(197)
С	2.05	2.13	2.47	2.63	2.96	3.25	3.68	4.59
	(52)	(54)	(63)	(67)	(75)	(83)	(93)	(117)
WTS.	0.90	0.90	1.40	1.90	3.20	4.80	5.90	10.20
	(0.41)	(0.41)	(0.64)	(0.86)	(1.45)	(2.18)	(2.68)	(4.63)