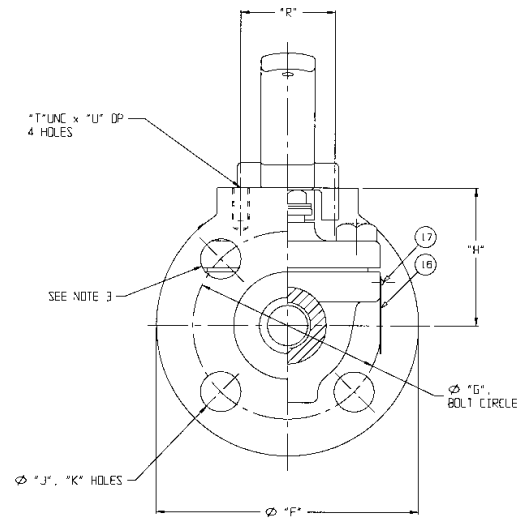
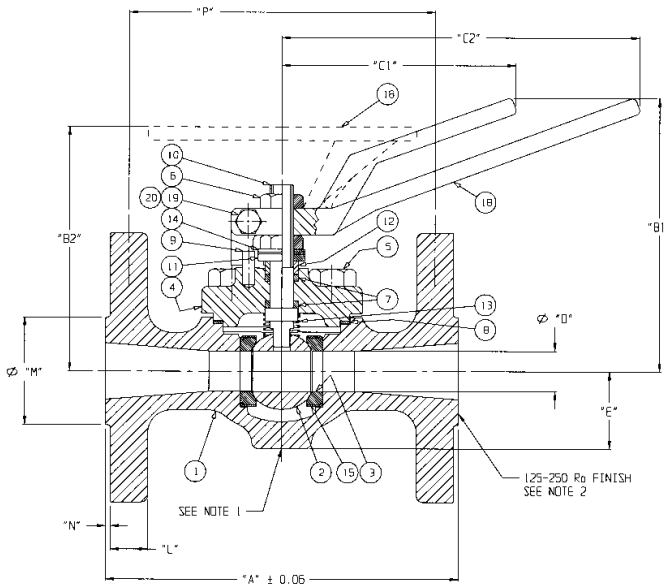


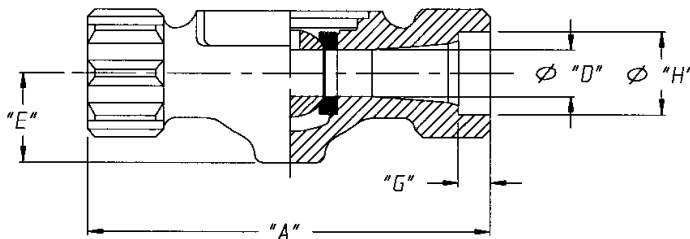
Dimensions, Weights, & Parts Lists

1/2" - 2" Valves

Flanged Body



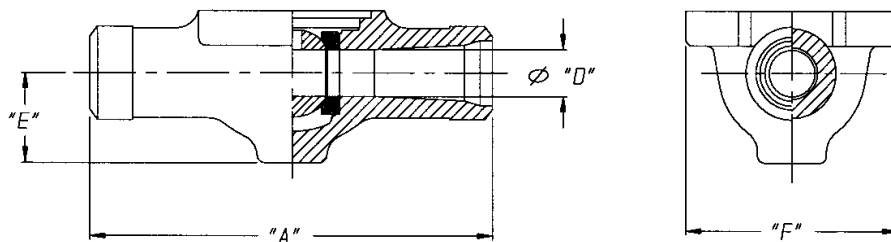
Socket Weld & Threaded Body



NOTE:

1. Body boss can be drilled, tapped, and plugged.
2. End machining meets ANSI B16.5 for flanged ends.
3. 1/2" & 3/4" 150 lb. class flanged bolt holes are tapped 1/2"-13 UNC class 2B. Top two holes are blind drilled and tapped.
4. The design meets ANSI B16.34, MSS-SP 72 & ANSI B16.10.
5. Valve is shown in the open position. Clockwise rotation of stem closes the valve.

Butt Weld Body



Flanged Body

Valve Size	Pressure Class	"A" Dim.	"B1" Dim.	"B2" Dim.	"C1" Dim.	"C2" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	"G" Dim.	"H" Dim.	"J" Dim.	"K"	"L" Dim.	"M" Dim.	"N" Dim.	"P" Dim.	"R" Dim.	"T" Dim.	"U" Dim.	Weight				
																					Lbs	Kg			
1/2"	150#	4.25 (113.0)					0.62 (15.7)	1.44 (36.6)	3.50 (88.9)	2.38 (60.4)	1.94 (49.3)		4	0.38 (9.6)	1.38 (35.0)	0.06 (1.5)	3.62 (91.9)	2.00 (50.8)	1/4-20 UNC	0.38 (9.6)	6.9	3.1			
	300#	5.50 (139.7)							3.75 (95.2)	2.62 (66.5)	2.06 (52.3)	0.63 (16.0)		0.50 (12.7)		4.88 (124.0)	7.9				3.6				
	600#	6.50 (165.1)												0.61 (15.5)		5.38 (136.6)	9.0				4.1				
3/4"	150#	4.62 (117.3)	5.10 (129.5)	4.62 (117.3)	4.35 (110.5)	0.75 (19.0)	1.44 (36.6)	3.88 (98.6)	2.75 (69.8)	2.12 (53.8)		0.75 (19.0)	4	0.41 (10.4)	1.69 (42.9)	0.06 (1.5)	4.00 (101.6)	1.75 (44.4)	5/16-18 UNC	0.62 (15.7)	8.0	3.6			
	300#	6.00 (152.4)												4.62 (117.3)		3.25 (82.6)	2.50 (63.5)				0.75 (19.0)	0.56 (14.2)	5.31 (134.9)	11.5	5.2
	600#	7.50 (190.5)																				0.67 (17.0)	6.31 (160.3)	13.0	5.8
1"	150#	5.00 (127.0)					1.12 (28.4)	1.72 (43.7)	4.25 (108.0)	3.12 (79.2)		0.75 (19.0)	4	0.41 (10.4)	2.00 (50.8)	0.06 (1.5)	4.19 (106.4)	1.75 (44.4)	5/16-18 UNC	0.62 (15.7)	9.0	4.1			
	300#	6.50 (165.1)							4.88 (124.0)	3.50 (88.9)	2.56 (65.0)			0.75 (19.0)		0.69 (17.5)	5.69 (144.5)				12.0	5.4			
	600#	8.50 (215.9)														0.74 (18.8)	7.25 (184.2)				14.5	6.5			
1 1/2"	150#	6.50 (165.1)	5.65 (143.5)	5.16 (131.1)	5.14 (130.6)	1.12 (28.4)	1.72 (43.7)	5.00 (127.0)	3.88 (98.6)	3.00 (76.2)	0.63 (16.0)	0.88 (22.4)	4	0.56 (14.2)	2.88 (73.2)	0.06 (1.5)	5.62 (142.7)	1.75 (44.4)	5/16-18 UNC	0.62 (15.7)	22.0	9.9			
	300#	7.50 (190.5)												6.12 (155.4)		4.50 (114.3)	3.31 (84.1)				0.88 (22.4)	0.81 (20.6)	6.56 (166.6)	24.0	10.8
	600#	9.50 (241.3)																				0.93 (23.6)	8.00 (203.2)	23.5	10.6
2"	150#	7.00 (177.8)	6.60 (167.6)	5.54 (140.7)	8.65 (219.7)	1.50 (38.1)	2.06 (52.3)	6.00 (152.4)	4.75 (120.6)	3.12 (79.2)	0.75 (19.0)	8	0.62 (15.7)	3.62 (91.9)	0.06 (1.5)	6.19 (157.2)	2.25 (57.2)	5/16-18 UNC	0.62 (15.7)	30.0	13.5				
	300#	8.50 (215.9)													6.50 (165.1)	5.00 (127.0)				3.75 (95.2)	0.88 (22.4)	0.88 (22.4)	7.50 (190.5)	34.0	15.3
	600#	11.50 (292.1)																				1.05 (26.7)	9.88 (251.0)		

Dimensions in parenthesis () are in millimeters.

Socket Weld & Threaded Body

Valve Size	Pressure Class	"A" Dim.	"B1" Dim.	"B2" Dim.	"C1" Dim.	"C2" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	"G" Dim.	"H" Dim.	Weight	
												Lbs	Kg
1/2"	150-600#	5.50 (139.7)					0.62 (15.7) - Socketweld 0.70 (17.8) - Threaded	1.44 (36.6)	3.44 (87.4)	0.39 (9.9)	0.86 (21.8)	5.7	2.6
3/4"		6.00 (152.4)	5.10 (129.5)	4.62 (117.3)	4.35 (110.5)	0.75 (19.0)	0.51 (13.0)			1.07 (27.2)	5.8	2.6	
1"		6.50 (165.1)					0.51 (13.0)	1.34 (34.0)	6.5	2.9			
1 1/2"		7.50 (190.5)	5.65 (143.5)	5.16 (131.1)	5.14 (130.6)	1.12 (28.4)	1.72 (43.7)	3.81 (96.8)	0.51 (13.0)	1.92 (48.8)	13.0	5.8	
2"		8.50 (215.9)	6.60 (167.6)	5.54 (140.7)	8.65 (219.7)	1.50 (38.1)	2.06 (52.3)	4.81 (122.2)	0.63 (16.0)	2.41 (61.2)	18.0	8.1	
		11.50 (292.1)											

Butt Weld Body

Valve Size	Pressure Class	"A" Dim.	"B1" Dim.	"B2" Dim.	"C1" Dim.	"C2" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	Weight	
										Lbs	Kg
1/2"	150-300#	5.50 (139.7)					0.56 (14.2)			5.3	2.4
	600#	6.50 (165.1)								5.7	2.6
3/4"	150-300#	6.00 (152.4)	5.10 (129.5)	4.62 (117.3)	4.35 (110.5)		0.68 (17.3)	1.44 (36.6)	3.44 (87.4)	5.5	2.5
	600#	7.50 (190.5)					0.62 (15.7)			7.0	3.2
1"	150-300#	6.50 (165.1)					0.75 (19.0)			6.0	2.7
	600#	8.50 (215.9)								6.5	2.9
1 1/2"	150-300#	7.50 (190.5)	5.65 (143.5)	5.16 (131.1)	5.14 (130.6)	1.12 (28.4)	1.72 (43.7)	3.81 (96.8)		13.0	5.8
	600#	9.50 (241.3)								14.0	6.3
2"	150-300#	8.50 (215.9)	6.60 (167.6)	5.54 (140.7)	8.65 (219.7)	1.50 (38.1)	2.06 (52.3)	4.81 (122.2)		17.0	7.6
	600#	11.50 (292.1)								18.5	8.3

Bill of Materials - Base Valve with Standard Cover

Item	Qty	Description	Carbon Steel	Stainless Steel	Alloy 20	Hastelloy
1	1	BODY	CS ASTM A216 GR WCB ▲	SS ASTM A351 GR CF8M □	SS ASTM A351 GR CN7M	HAST ASTM A494 CW6M ⇄
2	1	BALL	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM B473 N08020	HAST ASTM B574 10276
* 3	2	SEAT ●	PTFE	PTFE	PTFE	PTFE
4	1	COVER	CS ASTM A216 GR WCB ▲	SS ASTM A351 GR CF8M	SS ASTM A351 GR CN7M	HAST ASTM A494 CW6M
5	4	SCREW, HEX HO. CAP	CS ASTM A193 GR B7	SS ASTM A193 GR B8	SS ASTM A193 GR B8	SS ASTM A193 GR B8
6	2	NUT, HEX JAM	CS	CS	CS	CS
* 7	2	SEAL, STEM ●	PTFE	PTFE	PTFE	PTFE
* 8	1	GASKET ●	PTFE	PTFE	PTFE	PTFE
9	1	PIN, GROOVED	SS	SS	SS	SS
10	1	STEM	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM B473 N08020	HAST ASTM B574 10276
11	1	WASHER, FLAT	CS ASTM A659 GR1018	CS ASTM A659 GR1018	CS ASTM A659 GR1018	CS ASTM A659 GR1018
12	1	RING, GLAND	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316
13	1	SPRING	SS ASTM A313 TYPE 316	SS ASTM A313 TYPE 316	INCONEL ASTM B637, X750	INCONEL ASTM B637, X750
14	2	WASHER, BELLEVILLE	CS ASTM A684	CS ASTM A684	CS ASTM A684	CS ASTM A684
* 15	2	RING, SEAT	SS ASTM A240 TYPE 316	SS ASTM A240 TYPE 316	ALLOY 20 ASTM B463 N08020	HAST ASTM B574 10276
16	1	PLATE, IDENT	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304
17	2	SCREW, DRIVE	CS	CS	CS	CS
18	1	HANDLE	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB
19	1	SCREW, HEX HO. CAP	STEEL	STEEL	STEEL	STEEL
20	1	NUT, HEX	STEEL	STEEL	STEEL	STEEL

□ - Buttweld, socketweld and threaded bodies are ASTM A351-CF3M.
 ⇄ - Buttweld, socketweld and threaded bodies are ASTM A494-CW2M.
 ● - Refer to the "Ordering Information" section of this catalog for specific seat/seal combinations.

✳ - Extended covers have three stem seals.
 * - Recommended spare parts. Available as seat/seal kit.
 ▲ - Zinc phosphate coated.

Flanged Body

Valve Size	Pressure Class	"A" Dim.	"B" Dim.	"C" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	"G" Dim.	"H" Dim.	"J" Dim.	"K" Dim.	"L" Dim.	"M" Dim.	"N" Dim.	"P" Dim.	"R" Dim.	"T" Dim.	"U" Dim.	Weight		
																			Lbs	Kg	
3"	150#	8.00 (203.2)	8.00 (203.2)	15.12 (384.0)	2.25 (57.2)	2.88 (73.2)	7.50 (190.5)	6.00 (152.4)	4.00 (101.6)	0.75 (19.0)	4	0.75 (19.0)	5.00 (127.0)	0.06 (1.5)	7.12 (180.8)	3.50 (88.9)	3/8-16 UNC	0.75 (19.0)	41.0	18.4	
	300#	11.12 (282.4)					8.25 (209.6)	6.62 (168.1)	4.50 (114.3)	0.88 (22.4)		1.12 (28.4)		9.88 (251.0)	64.0				28.8		
	600#	14.00 (355.6)	9.00 (228.6)		7.50 (190.5)	4.88 (124.0)	0.75 (19.0)	1.32 (33.5)	8.00 (203.2)	77.0		34.6									
4"	150#	9.00 (228.6)	9.00 (228.6)		15.12 (384.0)	3.00 (76.2)	3.38 (85.8)	9.00 (228.6)	7.50 (190.5)	4.88 (124.0)	0.75 (19.0)	8	0.94 (23.9)	6.19 (157.2)	0.06 (1.5)	8.00 (203.2)	4.00 (101.6)	7/16-14 UNC	0.88 (22.4)	54.0	24.3
	300#	12.00 (304.8)						10.00 (254.0)	7.88 (200.2)	5.62 (142.7)	0.88 (22.4)		1.25 (31.8)		10.69 (271.5)	102.0				45.9	
	600#	17.00 (431.8)						10.75 (273.0)	8.5 (215.9)	1.00 (25.4)	1.56 (39.6)		0.25 (6.4)		14.88 (378.0)	146.0				65.7	
6"	150#	15.50 (393.7)	12.51 (317.8)	21.37 (542.8)		4.00 (101.6)	4.56 (115.8)	11.00 (279.4)	9.50 (241.3)	6.50 (165.1)	0.88 (22.4)	12	1.00 (25.4)	8.50 (215.9)	0.06 (1.5)	14.38 (365.2)	4.00 (101.6)	0.75 (19.0)	198.4	89.3	
	300#	15.88 (403.4)						12.50 (317.5)	10.62 (269.7)	7.12 (180.8)	1.44 (36.6)		0.25 (6.4)		235.0	105.8					

Dimensions in parenthesis () are in millimeters.

Socket Weld & Threaded Body

Valve Size	Pressure Class	"A" Dim.	"B" Dim.	"C" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	"G" Dim.	"H" Dim.	Weight Lbs	Kg
3"	150-300#	11.12 (282.4)	8.00 (203.2)	15.12 (384.0)	2.25 (57.2)	2.88 (73.2)	7.50 (190.5)	0.63 (16.0)	3.54 (89.9)	42.0	18.9

Butt Weld Body

Valve Size	Pressure Class	"A" Dim.	"B" Dim.	"C" Dim.	"D" Dim.	"E" Dim.	"F" Dim.	Weight Lbs	Kg		
3"	150-300#	11.12 (282.4)	8.00 (203.2)	15.12 (384.0)	2.25 (57.2)	2.88 (73.2)	7.50 (190.5)	39.0	17.5		
	600#	14.00 (355.6)						47.0	21.2		
4"	150-300#	12.00 (304.8)	9.00 (228.6)		15.12 (384.0)	3.00 (76.2)	3.38 (85.8)	8.38 (212.8)	61.0	27.4	
	600#	17.00 (431.8)							8.63 (219.2)	80.0	36.0
6"	150-300#	15.88 (403.4)	12.51 (317.8)			21.37 (542.8)	4.00 (101.6)	4.56 (115.8)	12.10 (307.3)	164.16	74.1

Bill of Materials - Base Valve with Standard Cover

Item	Qty	Description	Carbon Steel	Stainless Steel	Alloy 20	Hastelloy
1	1	BODY	CS ASTM A216 GR WCB ▲	SS ASTM A351 GR CF8M □	ALLOY ASTM A351 GR CN7M	HAST ASTM A494 CW6M ⇨
2	1	BALL	SS ASTM A351 CF8M	SS ASTM A351 CF8M	ALLOY 20 ASTM A351 CN7M	HAST ASTM B574 10276
* 3	2	SEAT ●	PTFE	PTFE	PTFE	PTFE
4	1	COVER	CS ASTM A216 GR WCB ▲	SS ASTM A351 GR CF8M	ALLOY ASTM A351 GR CN7M	HAST ASTM A494 CW6M
5	Ω 8	SCREW, HEX HO. CAP	CS ASTM A193 GR B7	SS ASTM A193 GR B8	SS ASTM A193 GR B8	SS ASTM A193 GR B8
6	1	NUT, HEX JAM	CS	SS	SS	SS
* 7	≡ 2	SEAL, STEM ●	PTFE	PTFE	PTFE	PTFE
* 8	1	GASKET ●	PTFE	PTFE	PTFE	PTFE
9	1	PIN, GROOVED	SS	SS	SS	SS
10	1	STEM	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	ALLOY 20 ASTM B473 N08020	HAST ASTM B574 10276
11	1	ROTATIONAL STOP	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB	CS ASTM A216 GR WCB
12	1	RING, GLAND	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316	SS ASTM A276 TYPE 316
13	1	SPRING	SS ASTM A313 TYPE 316	SS ASTM A313 TYPE 316	INCONEL ASTM B637, X750	INCONEL ASTM B637, X750
14	2	WASHER, BELLEVILLE	CS ASTM A684	17-7PH	17-7PH	17-7PH
* 15	2	RING, SEAT	SS ASTM A240 TYPE 316	SS ASTM A240 TYPE 316	ALLOY 20 ASTM B463 N08020	HAST ASTM B574 10276
16	1	PLATE, IDENT	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304	SS ASTM A240 TYPE 304
17	2	SCREW, DRIVE	CS	CS	CS	CS
18	1	HANDLE	CS ASTM A-53	CS ASTM A-53	CS ASTM A-53	CS ASTM A-53
19	1	SCREW, HEX HO. CAP	STEEL	SS	SS	SS
20	1	SCREW, SOC. HO. SET	STEEL	STEEL	STEEL	STEEL
21	1	CIRCLE, COTTER	STEEL	STEEL	STEEL	STEEL
22	1	HUB, LEVER	CS ASTM A216 GR WCB ▲	CS ASTM A216 GR WCB ▲	CS ASTM A216 GR WCB ▲	CS ASTM A216 GR WCB ▲
23	1	GRIP, HANDLE	PLASTIC	PLASTIC	PLASTIC	PLASTIC
24	2	SCREW, FLAT HO. MACH.	STEEL	STEEL	STEEL	STEEL
25	1	PLATE, LOCKING	CS ASTM A108-1018	CS ASTM A108-1018	CS ASTM A108-1018	CS ASTM A108-1018

□ - Buttweld, socketweld and threaded bodies are ASTM A351-CF3M.

⇨ - Buttweld, socketweld and threaded bodies are ASTM A494-CW2M.

● - Refer to the "Ordering Information" section of this catalog for specific seat/seal combinations.

≡ - Extended covers have three stem seals.

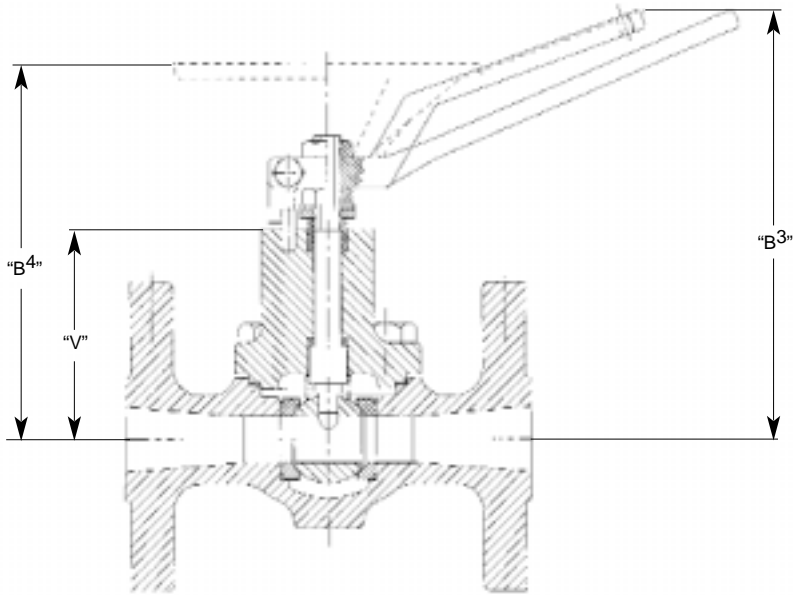
Ω - 3" and 4" Class 150 flanged valves have four cap screws.

* - Recommended spare parts. Available as seat/seal kit.

▲ - Zinc phosphate coated.

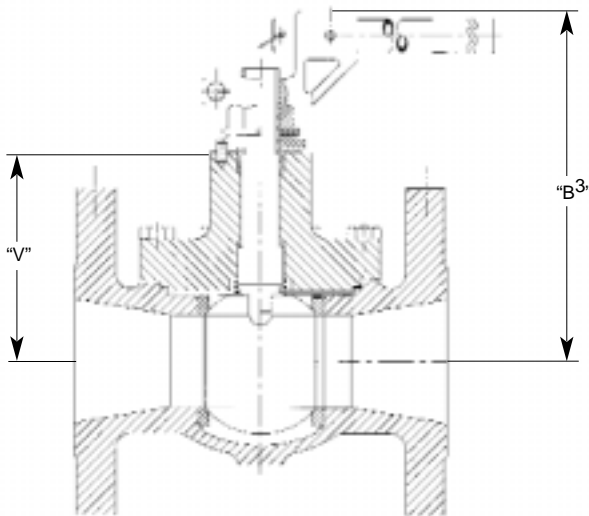
Dimensions

Extended Bonnet Valves



Valve Size	"B ³ " Dim.	"B ⁴ " Dim.	"V" Dim.
1/2"	6.65	6.12	3.41
3/4"	(168.9)	(155.4)	(86.6)
1"			
1 1/2"	7.44	6.91	4.14
	(189.0)	(175.5)	(105.2)
2"	8.80	7.54	4.63
	(223.5)	(191.5)	(117.6)

Numbers in parenthesis () are in millimeters.



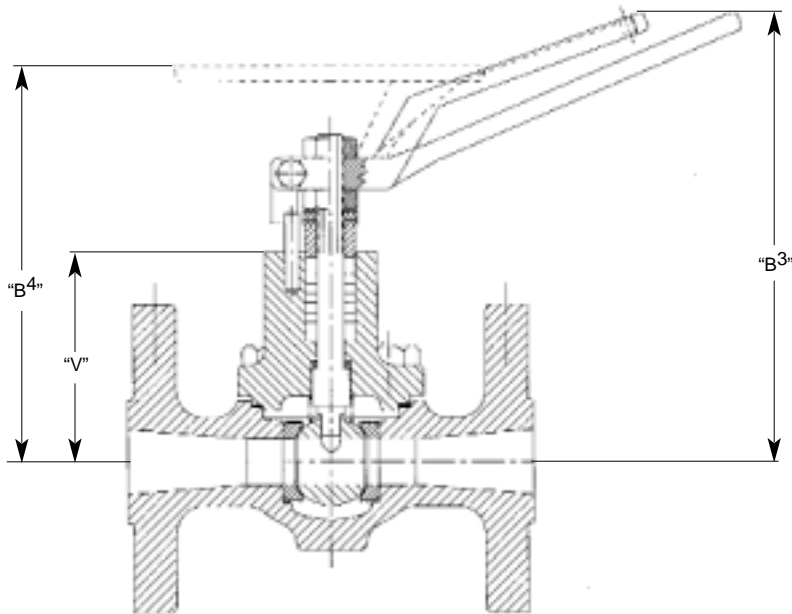
Valve Size	"B ³ " Dim.	"V" Dim.
3"	10.30	5.84
	(261.6)	(148.3)
4"	11.46	6.79
	(291.1)	(172.5)
6"	15.50	8.62
	(393.7)	(218.9)

Numbers in parenthesis () are in millimeters.

The basic dimensions shown above are for Cam-Tite Ball Valves with extended bonnets as described on page 9. All components with the exception of the bonnet and stem are interchangeable on valves with standard bonnets. Parts identification and materials are also consistent with the standard bonnet and are described for the various configurations on pages 20-23. For complete dimensions and materials of construction for the extended bonnet, consult the factory.

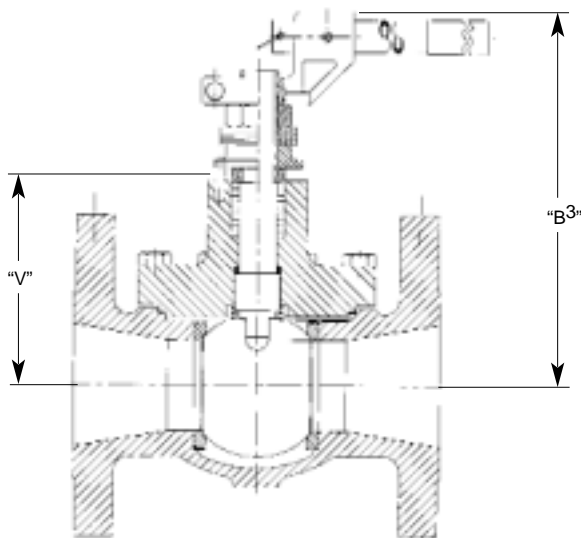
Dimensions

Extended Bonnet Valves



Valve Size	"B ³ " Dim.	"B ⁴ " Dim.	"V" Dim.
1/2"	6.91	6.36	3.41
3/4"	(175.5)	(161.5)	(86.6)
1"			
1 1/2"	8.03 (204.0)	7.19 (182.6)	4.14 (105.2)
2"	9.05 (229.9)	7.80 (198.1)	4.63 (117.6)

Numbers in parenthesis () are in millimeters.



Valve Size	"B ³ " Dim.	"V" Dim.
3"	11.13 (282.7)	5.84 (148.3)
4"	12.33 (313.2)	6.79 (172.5)
6"	15.77 (400.6)	8.62 (218.9)

Numbers in parenthesis () are in millimeters.

The basic dimensions shown above are for Cam-Tite Ball Valves with severe service bonnets as described on page 9. All components with the exception of the bonnet, stem and stem seals are interchangeable on valves with standard bonnets. Otherwise, parts identification and materials are consistent with the standard bonnet and are described for the various configurations on pages 20-23. For complete dimensions and materials of construction for the severe service bonnet, consult the factory.