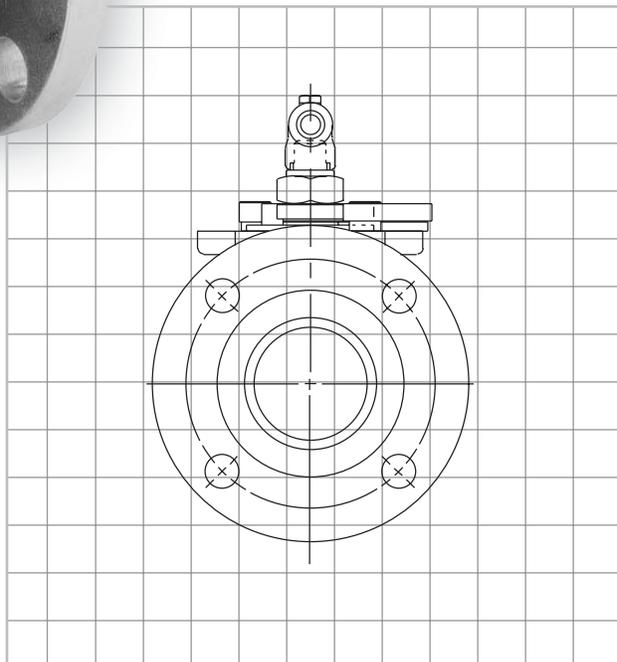
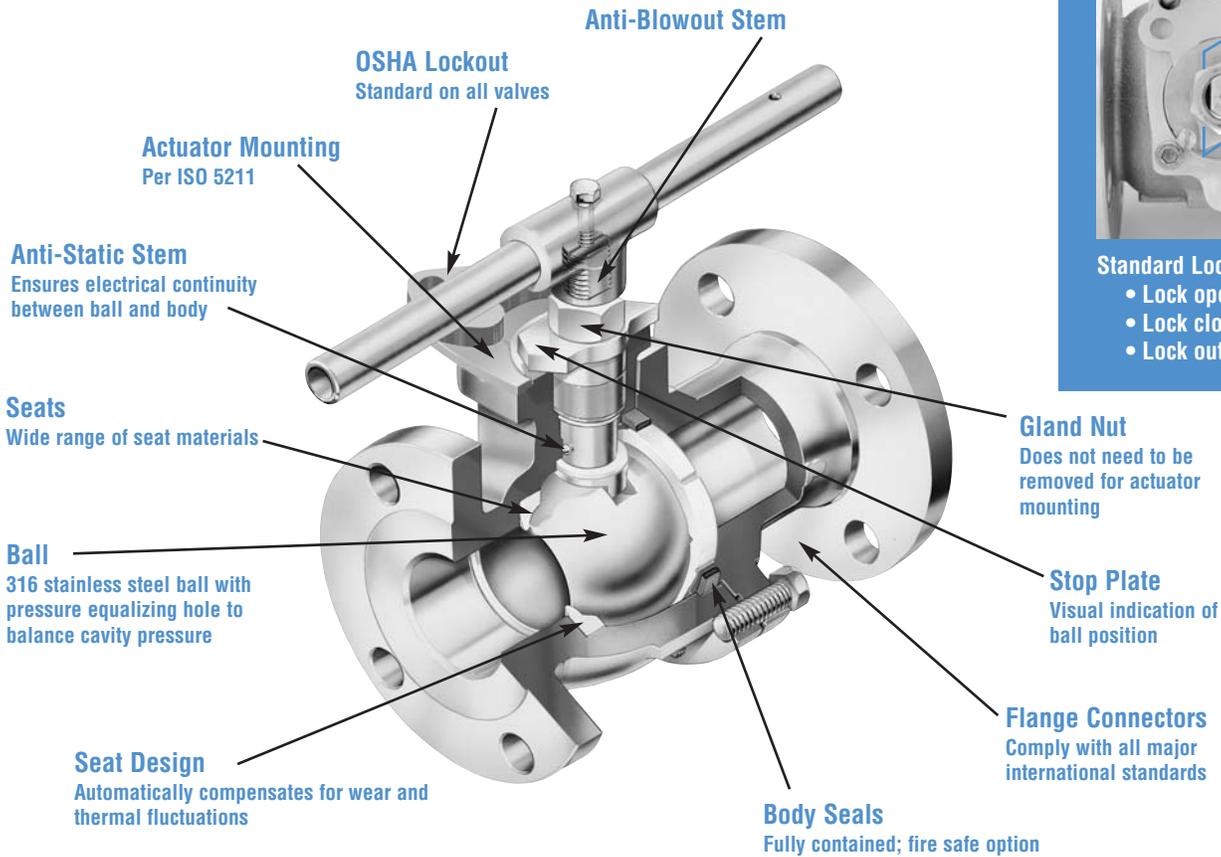


AN ISO 9001 REGISTERED COMPANY



***Series 818/828
Full Bore Flanged Ball Valves***

Worcester's all new full port ball valve features worldwide design standardization, fire-safety, OSHA lockout, ISO actuator mounting and best price and performance value.



Specifications

Sizes: 2", 3", 4", 6", 8"

Standard Valve Model Numbers: Series 818 ANSI Class 150
Series 828 ANSI Class 300

Firesafe Valve Model Numbers: Series AF818 ANSI Class 150
Series AF828 ANSI Class 300
Series FZ818 (2" only)
Series FZ828 (2" only)

Body Materials: Carbon Steel
Stainless Steel

Seats: TFE, Reinforced TFE, Polyfill®

Body Seal: TFE (Graphite on AF and FZ Firesafe Valves)

Stem Seals: Reinforced TFE (Graphite on AF and FZ Firesafe Valves)

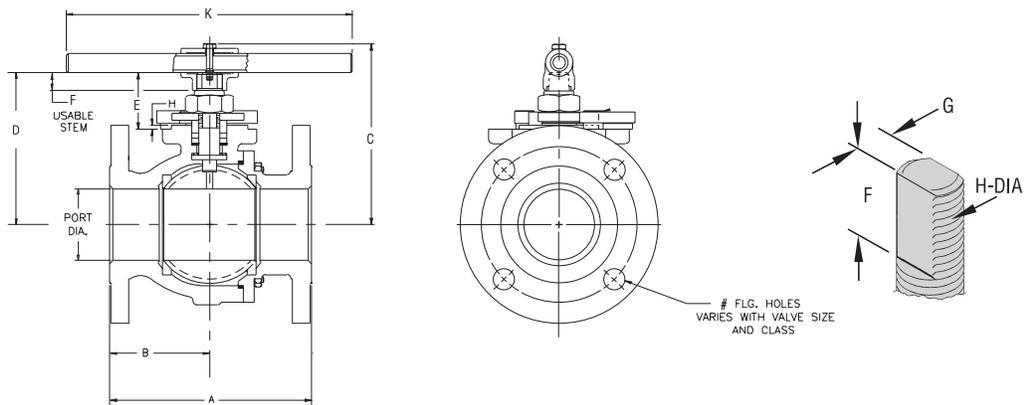
Actuator Mounting: ISO 5211

Standards: B16.34
ASME B16.10 face to face dimensions
ASME B16.5 150 lb. & 300 lb. flange dimensions
API 6D Pipeline Valves. Specify V39 option
API 607 Ed. 4, BS6755
MSS SP6 flange finish (125-250 Ra)
NACE MR0175-95
BS5500 and ASME VIII bolt & pressure vessel codes

Certifications to above standards are available on request. Specify when ordering.

Valve Torque: Refer to full port valve torque values in Actuator Sizing Manual (ASM).

Dimensions inches (mm)

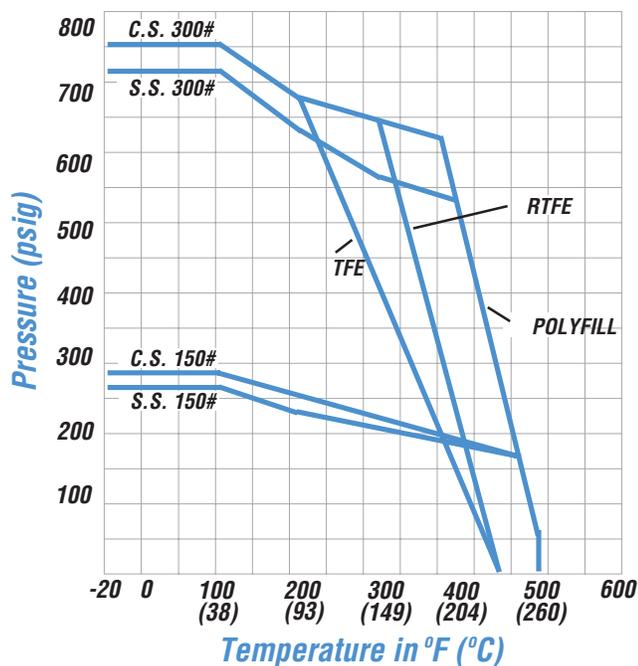


Valve Size	Weight lbs. (Kg)	
	818	828
2"	55 (25.0)	65 (29.5)
3"	75 (34.0)	100 (45.4)
4"	110 (50.0)	150 (68.0)
6"	210 (95.3)	275 (125)
8"	375 (170)	525 (238)

Valve Size	818-ANSI Class 150 Ball Valves										828-ANSI Class 300 Ball Valves									
	A	B	C	D	E	F Usable Stem	G	H	K	ISO MTG.	A	B	C	D	E	F Usable Stem	G	H	K	ISO MTG.
2"	7.00 (178)	2.90 (73.7)	6.16 (157)	5.12 (130)	1.68 (42.7)	.70 (17.8)	.549 (13.9)	.787 (20.0)	10.00 (254)	F07	8.50 (216)	2.90 (73.7)	6.16 (157)	5.12 (130)	1.68 (42.7)	.70 (17.8)	.549 (13.9)	.787 (20.0)	10.00 (254)	F07
3"	8.00 (203)	3.68 (93.5)	7.89 (200)	6.37 (162)	1.96 (49.8)	.68 (17.3)	.592 (15.0)	.831 (21.1)	15.8 (401)	F07	11.1 (282)	3.68 (93.5)	8.41 (214)	6.85 (174)	2.15 (54.6)	.84 (21.3)	.758 (19.3)	1.07 (27.2)	24.0 (610)	F10
4"	9.00 (229)	4.61 (117)	9.23 (234)	7.67 (195)	2.15 (54.6)	.84 (21.3)	.758 (19.3)	1.07 (27.2)	24.0 (610)	F10	12.0 (305)	5.20 (132)	10.8 (274)	8.60 (218)	2.82 (71.6)	1.13 (28.7)	1.04 (26.4)	1.30 (33.0)	39.5 (1003)	F12
6"	15.5 (394)	7.03 (179)	12.2 (310)	9.98 (254)	2.82 (71.6)	1.13 (28.7)	1.04 (26.4)	1.30 (33.0)	39.5 (1003)	F12	15.9 (404)	7.03 (179)	12.8 (325)	10.6 (269)	2.99 (75.9)	1.17 (29.7)	1.19 (30.2)	1.49 (37.9)	39.5 (1003)	F14
8"	18.0 (457)	8.10 (206)	—	12.3 (313)	2.99 (76.0)	1.17 (29.7)	1.19 (30.2)	1.49 (37.9)	—	F14	16.5 (419)	8.10 (206)	—	13.5 (343)	3.42 (86.9)	1.42 (36.1)	1.35 (34.3)	1.67 (42.4)	—	F16

Worcestor flanged valves are designed to conform to ASME B16.5-1996 standards. Selected dimensions from that publication are shown in brochure No. PB51 (Series 51/52 Valves) and Engineering Data Sheet ED-2.

Pressure/Temperature Rating

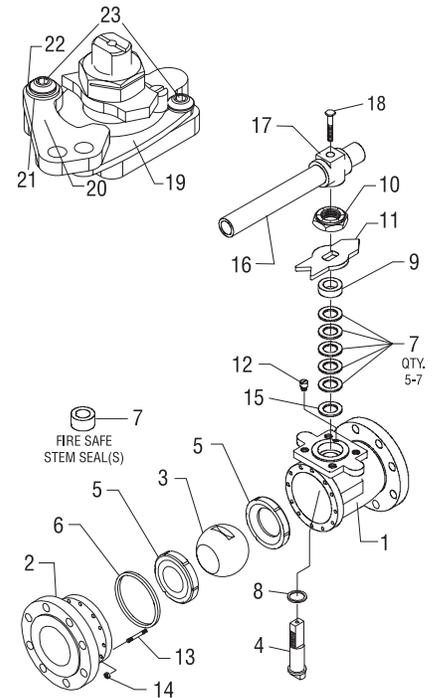


Flow Coefficient - Cv

Valve Size	Port Size inches (mm)	C _v
2"	2.00 (50.8)	501
3"	3.00 (76.2)	1,158
4"	4.00 (102)	2,118
6"	6.00 (152)	5,047
8"	8.00 (204)	9,337

Parts/Materials

No.	Part Name	Materials	No.	Part Name	Materials
1	Body	Carbon Steel ASTM-A216 WCB Stainless Steel ASTM-A351 CF8M	13	Body Studs	Carbon Steel ASTM-A193 GR. B7, Black Oxide Coated Stainless Steel ASTM-A193 GR. B8
2	End Connector	Carbon Steel ASTM-A216 WCB Stainless Steel ASTM-A351 CF8M	14	Body Nuts	Carbon Steel ASTM-A194-GR. 2H, Zinc Plated Stainless Steel ASTM-A194 GR. 8
3	Ball	Stainless Steel ASTM-A351 CF8M or ASTM A479-316, Cond. A	15	Centering Washer	Stainless Steel AISI 316
4	Stem	Stainless Steel ASTM-A479-316 Condition A	16	Wrench Extension	Carbon Steel ASTM-A53, Galvanized Stainless Steel ASTM-A312, 300 Series
5	Seat	TFE, Reinforced TFE, Polyfill	17	Wrench Block	Stainless Steel ASTM-A743-CF8
6	Body Seal	TFE, Z (Graphite) seal used on AF & FZ valves	18	Hex Head Bolt	Stainless Steel AISI 300 Series
7	Stem Seals	Reinforced TFE, Graphite on AF & FZ valves	19	Fixed Lockplate	Stainless Steel AISI 300 Series
8	Thrust Bearing	Reinforced TFE, Graphite on AF & FZ valves	20	Moving Lockplate	Stainless Steel ASTM-A743-CF8 (304)
9	Follower	Stainless Steel ASTM-A276-316 Condition A or A269-300	21	Lock Spacer	Stainless Steel AISI 300 Series
10	Retaining Nut	Carbon Steel, Zinc Plated Stainless Steel AISI 303, Zinc Plated	22	Washer	Stainless Steel AISI 300 Series
11	Stop	Stainless Steel, 300 Series	23	Button Head Screw	Stainless Steel AISI 300 Series
12	Stop Screw	Stainless Steel ASTM-A276, 300 Series			



How To Order

Valve Size	Options	Design	Style	Body	Ball & Stem	Seals**	Body Seals**	End Connection
2" 3" 4" 6" 8"	() - Blank, No Options J - No handle, valve built for automation V - Clean for vacuum service X - Clean for oxygen service	() - Blank, Standard AF - Firesafe *FZ - Firesafe	818 - Class 150 828 - Class 300	4 - Carbon Steel 6 - 316 Stainless Steel	66 - 316 Stainless Steel	T - TFE R - Reinforced TFE P - Polyfill	T - TFE Z - Graphite	150 - ANSI 150# Flanges 300 - ANSI 300# Flanges

* 2" valves only.

** Use only one letter if body seal is same material as seat.

† AF and FZ Fire safe valves only available with Z body seals.

Note: Standard Worcester Valves are assembled with silicon based break in lubricant. For other options, consult your distributor.

Ordering Example: A 3" Series 818 full port flanged valve with carbon steel body, 316 stainless steel ball and stem, reinforced TFE seats, TFE body seal, ANSI Class 150 flanges and manual lever or handle.

Caution: Ball valves can retain pressurized media in the body cavity when closed. Use care when disassembling. Always open valve to relieve pressure prior to disassembly.

Due to continuous development of our product range, we reserve the right to alter the product specifications contained in this brochure, as required.

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