



# 83A-640 SERIES

CARBON STEEL 3-PIECE FULL PORT  
1500 CWP SCH. 80 BUTT WELD BALL VALVE



## STANDARD COMPLIANCE

- Valve Design: MSS SP-110, NACE MR0175 (2000) & MR0103 (2012)
- End Connections: Butt-Weld per ASME B16.25

- Valve Marking: MSS SP-25
- Production Testing: MSS SP-110

## FEATURES

- 3-piece construction w/ enclosed fasteners
- Full port
- Stainless steel trim & hardware
- Swing-out center section
- Pressure balanced solid ball
- Compression controlled RPTFE gaskets
- Anti-blowout one piece bottom entry stem
- Two-position locking
- Adjustable multi-piece PTFE “V” style packing

- Fully machined ISO 5211 mounting
- Cast bosses on the center-section and end caps for bleed & drain ports
- Vacuum service to 29 in of Hg.
- 150 psig saturated steam

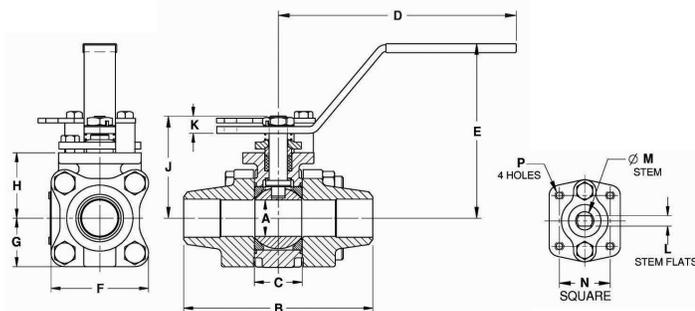
## VARIATIONS AVAILABLE

- 83A-340 Schedule 5 Butt-Weld
- 83A-440 Schedule 10 Butt-Weld
- 83A-540 Schedule 40 Butt-Weld

## OPTIONS AVAILABLE

(MORE INFORMATION IN SECTION J)

- Minimum quantities apply
- To specify an option, replace the “01” standard suffix with the suffix of the option.
- To specify multiple options, replace the “01” suffix with the desired suffixes in the numerical order shown below. NOTE: Not all suffixes can be combined together.



## STANDARD MATERIAL LIST

	PART	MATERIAL
1	Body	ASTM A216-WCB
2	End Caps	ASTM A216-WCB
3	Ball	ASTM A276-316SS
4	Stem	ASTM A276-316SS
5	Seat	Multi-Seal
6	Packing	PTFE
7	Stem Bearing	PEEK/PTFE
8	Body Gasket	RPTFE
9	Body Bolts	18-8 Stainless Steel
10	Body Nuts	18-8 Stainless Steel
11	Stop Bolts	18-8 Stainless Steel
12	Gland Bolts	18-8 Stainless Steel
13	Handle Nut/Screw	300 Series Stainless Steel
14	Packing Gland	ASTM A276-316SS
15	Gland Plate	300 Series Stainless Steel
16	Lever Handle	300 Series Stainless Steel
17	Lock Plate	300 Series Stainless Steel
18	Stops	300 Series Stainless Steel

(SUFFIX)	OPTION	SIZES
-01	Standard Configuration	All
-04-	2-1/4" Stem Extension (Carbon Steel, Zinc Plated)	All
-14-	Vented Ball	All
-15-	Stainless Steel Locking Round Handle	All
-49-	No Lubrication. Assembled Dry	All
-60-	Static Grounding	All
-62-	Center Section Only	All
-66-	FNPT x Butt-weld	All
-67-	Cleaned for Industrial Gases	All
-69-	Drilled & Tapped Purge & Drains	All
-70-	4" Extended Bonnet	All
-76-	Live Loaded (Lever Operated)	All
-77-	Live Loaded (Actuated)	All
-SR-	Spring Return Handle	1/2" to 1"
-UA-	AIS (American Iron & Steel) Compliant	All

Pressure/Temperature Ratings - Page M-19, Graph No. 23

## DIMENSIONS

PART NO.	SIZE	A	B	C	D	E	F	G	H	J	K	L	M	N	P	WT.
83A-643-01	1/2"	0.50	3.80	0.89	5.12	3.02	2.02	1.01	1.39	1.97	0.23	0.245	0.375	1.00	10-24	2.3
83A-644-01	3/4"	0.75	4.66	1.10	5.53	3.40	2.40	1.20	1.65	2.35	0.24	0.312	0.500	1.392	1/4-20	4.0
83A-645-01	1"	1.00	5.19	1.31	6.53	4.80	2.67	1.34	1.80	2.80	0.48	0.287	0.500	1.392	1/4-20	5.7
83A-647-01	1-1/2"	1.50	5.96	1.97	6.65	4.70	3.84	1.92	2.49	3.89	0.72	0.412	0.625	1.949	5/16-18	14.4
83A-648-01	2"	2.00	6.84	2.56	8.40	5.47	4.56	2.46	3.17	4.74	0.80	0.477	0.750	1.949	5/16-18	24.4

REV. 17SEP19