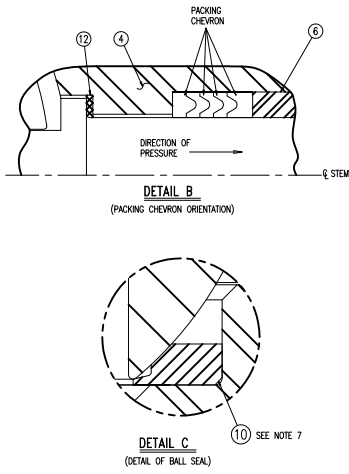
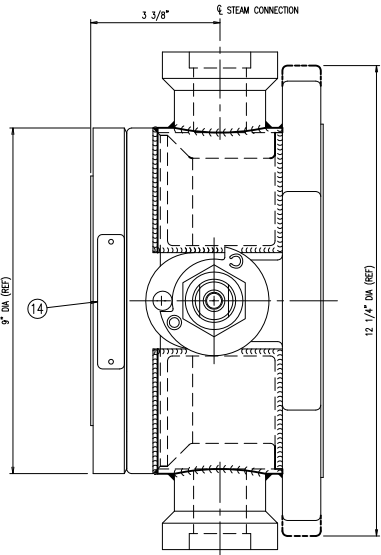
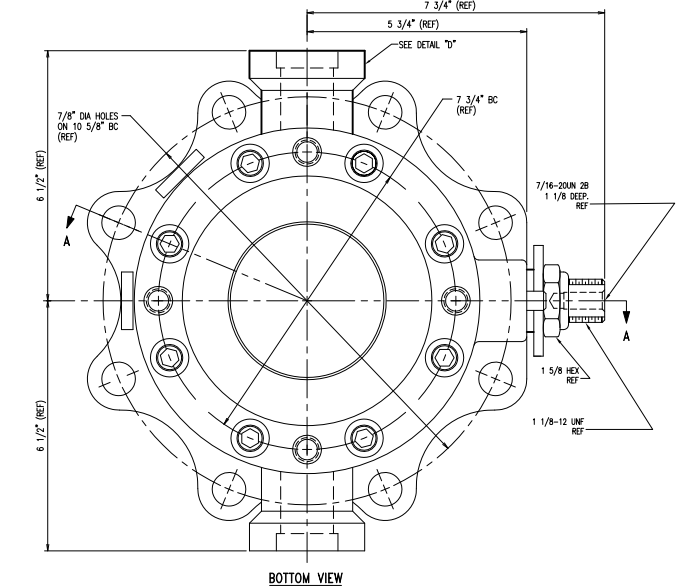


ITEMS 15, 16, 17
NOT SHOWN
ARE OPTIONAL

ITEM	QTY	PART NAME	A-522-CS-C1-SJ		A-522-M0-C1-SJ	
			PART NO.	MATERIAL	PART NO.	MATERIAL
1	1	CAP	520-1-CS	STEEL	520-1-M0	STAINLESS STEEL
2	1	STEM	520-2-SS	STAINLESS STEEL	520-2-SS	STAINLESS STEEL
3	1	BALL	520-3-M0	STAINLESS STEEL	520-3-M0	STAINLESS STEEL
4	1	BODY AND STEAM JACKET ASSEMBLY	522-43-CS	STEEL	522-43-M0	STAINLESS STEEL
5	1	PACKING	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART
6	1	SPACER	520-6-SS	STAINLESS STEEL	520-6-SS	STAINLESS STEEL
7	1	PIN	520-7-CS	STEEL	520-7-CS	STEEL
8	1	STOP PLATE	520-8-CS	STEEL PLATED	520-8-CS	STEEL PLATED
9	8	CAPSCREW, HEX-SOC, 5/8"-11UNC-2A X 1" LG	520-9-CS	STEEL	520-9-CS	STEEL
10	2	SEAL, BALL	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART
11	1	SEAL, VALVE BODY	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART
12	1	WASHER, THRUST	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART	SEE LINE CHART
13	1	LOCKNUT, HEX, THIN, 1 1/8"-12UNF, NYLON INSERT	520-13-CS	STEEL PLATED	520-13-CS	STEEL PLATED
14	1	NAMEPLATE	522-14-91-SS	STAINLESS STEEL	522-14-81-SS	STAINLESS STEEL
15	1	HANDLE	520-15-CS	STEEL	520-15-CS	STEEL
16	1	WASHER, HANDLE	520-16-CS	STEEL	520-16-CS	STEEL
17	1	BOLT, HANDLE	520-17-CS	STEEL	520-17-CS	STEEL



VALVE MODEL NO.	SEAL, BALL	
	PART NO.	MATERIAL
A-522-C1-CS-SJ	520-10-01-TF	VIRGIN TEFLON
A-522-C1-M0-SJ	520-10-01-TF	VIRGIN TEFLON
A-522-C1-CS-SJ-ST	520-10-04-ST	316 SS FILLED TEFLON
A-522-C1-M0-SJ-ST	520-10-04-ST	316 SS FILLED TEFLON

NOTES:

- STOP PIN (7) INSTALLATION INTO BODY (4) IS AN INTERFERENCE FIT. THE STOP PIN MUST EXTEND 0.50" AFTER BEING PRESSED INTO BODY.
- BODY SEAL (11) MUST BE PRESS-FIT INTO BODY (4) BEFORE CAP (1) IS INSTALLED.
- AFTER ASSEMBLY THE BODY (4) AND CAP (1) MUST MAKE INTIMATE CONTACT. NO GAP IS ALLOWED.
- STEM PACKING (5) TO BE INSTALLED WITH CHEVRONS ORIENTED PER DETAIL "B".
- TORQUE PACKING NUT TO 150 FT-LBS INITIALLY.
- AFTER ASSEMBLY OF VALVE THERE MUST BE A 1/8" MIN. AND 1/4" MAX. GAP BETWEEN THE BODY (4) AND THE VALVE STEM STOP (8).
- APPLY SMALL AMOUNT OF DOW CORNING 111 LUBRICANT ON 45° TAPER OF BALL SEALS (10) PRIOR TO ASSEMBLY.
- TORQUE SOCKET HEAD CAP SCREWS TO 130 LB-FT, IF THE REQUIREMENT OF NOTE 3 IS NOT MET, INCREASE TORQUE IN 40 LB-FT INCREMENTS UNTIL THE REQUIREMENT IS MET. DO NOT EXCEED 250 LB-FT.
- VALVE IS ASSEMBLED FOR COUNTER CLOCKWISE SHAFT ROTATION TO CLOSE.
- FOR CLOCKWISE SHAFT ROTATION TO CLOSE, REMOVE ITEM #13, REMOVE, TURN OVER AND REINSTALL ITEM #8, AND REINSTALL AND TIGHTEN ITEM #13 PER NOTE #5.

AAR E022012

MIDLAND MANUFACTURING CORP.
SKOKIE, IL, U.S.A.

4" BALL VALVE

MATERIAL: SEE TABLE	TOLERANCES UNLESS SPECIFIED: 2 PLACE DECIMAL ± .015 3 PLACE DECIMAL ± .005 ANGULAR ± 1', FRACTIONS ± 1/64 CHAMFERS AND WELD PREP ± 5°
REMOVE ALL BURRS. BREAK ALL EDGES & CORNERS.	FINISH (Ra) : √ =

B	3 3/8 WAS 3 3/16	FS	4/6/09	CHP
A	ADDED NOTE #7	FS	12/14/07	CHP
LTR	REVISIONS	DRN	DATE	APP

SCALE: 1-3.25	DRAWN: CHP	DATE: 11-3-06	APPROVED: CHP
CAD FILE NO. A522C1SJ	SIZE B	DWG NO. A-522-C1-SJ	REV B