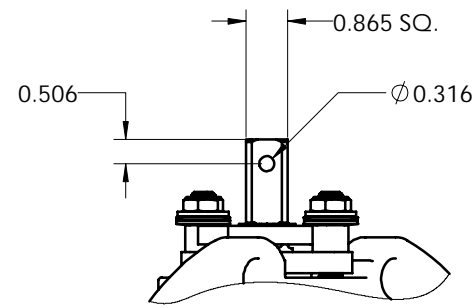
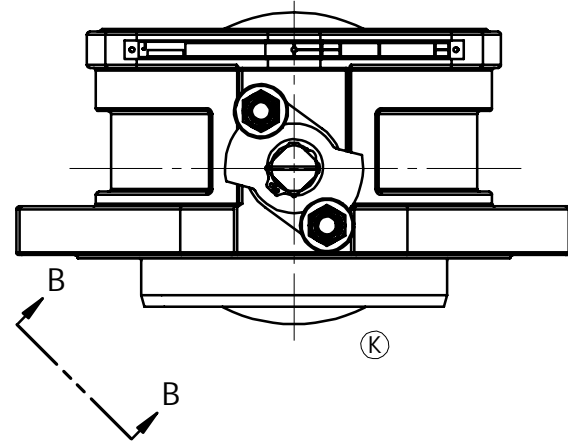
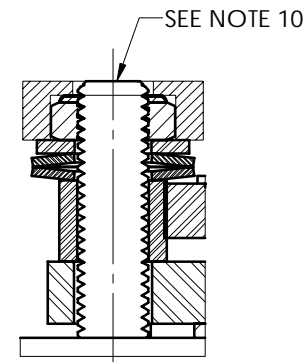


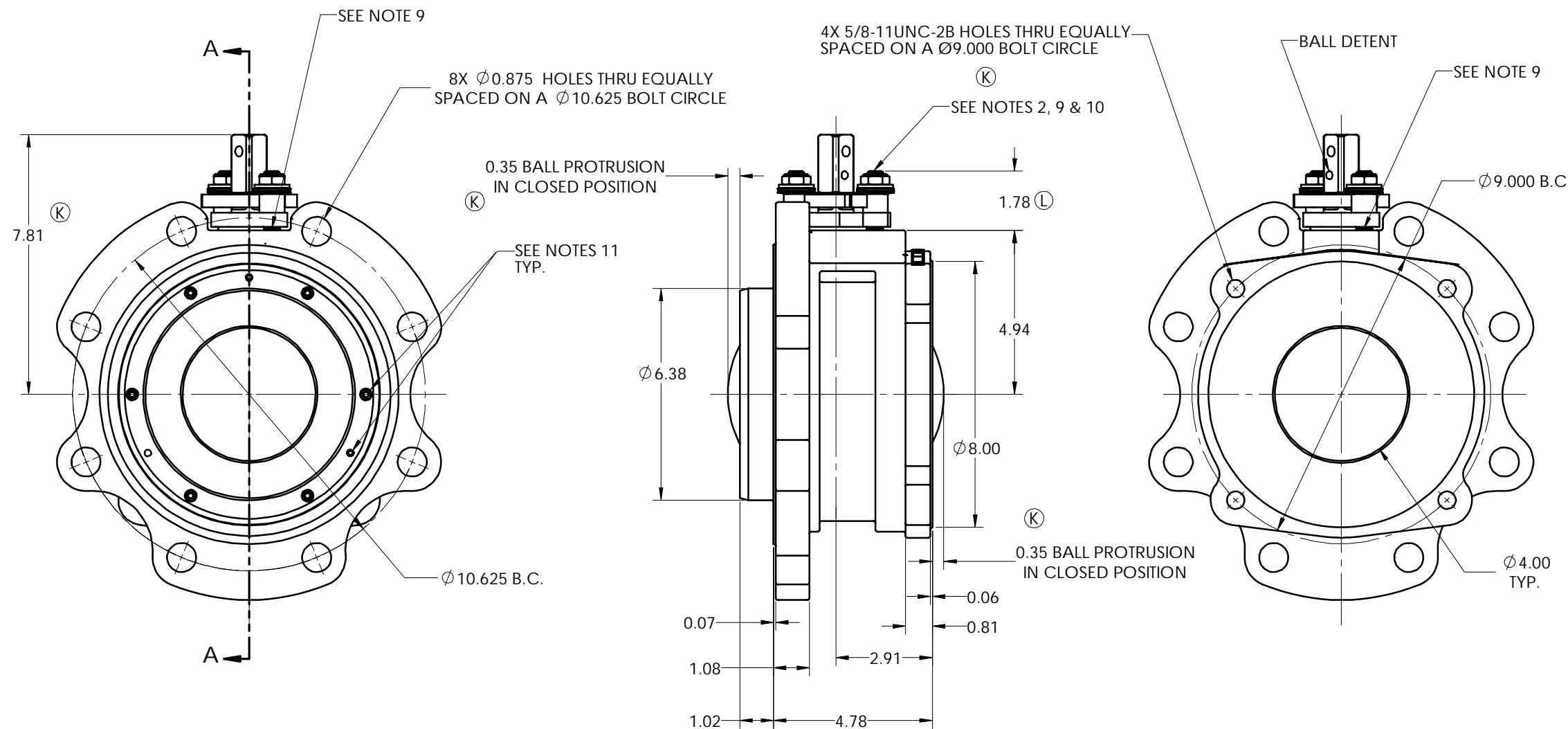
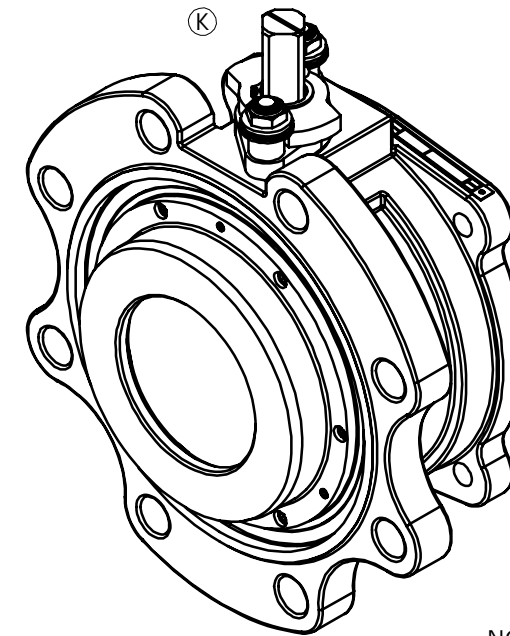
LET	ECN	REVISION	DRAWN	APPROVED	DATE
J	42347	REDRAWN IN SOLIDWORKS. ADDED STEAM JACKET AND COUPLINGS TO VIEWS	BC	WP	11/03/14
K	42735	SEE ECN FOR CHANGES	JPN	WP	01/19/15
L	43563	STUD HEIGHT 1.78 WAS 1.81	PJD	WP	3/31/16
M	43673	ADDED ITEM 78 STEAM JACKET RATING TAG. CHANGED QTY. OF ITEM 26 FROM 3 TO 5. ONLY ON STEAM JACKETED VALVE.	PJD	WP	6/2/16



AUXILIARY B



REQUIRED FASTENER TORQUE
INSERT CAP SCREW
23 IN. LBS.



NOTES

- FOR INSTALLATION, MAINTENANCE AND OPERATING INSTRUCTIONS, SEE IMO-R20.
- WHERE IDENTIFICATION APPEARS ON STUD END, ASSEMBLE WITH IDENTIFICATION ALWAYS VISIBLE.
-
- TAG ATTACHMENT PER JMA-126.
- HANDLE AND HANDLE PIN WILL BE SUPPLIED ONLY ON REQUEST. HANDLE PART NUMBER 012-0535-22 HANDLE PIN PART NUMBER 010-0092-41.
- TIGHTEN BONNET NUT UNTIL DISC SPRINGS ARE VISUALLY FLAT.
- FOR BARRIER SEAT ASSEMBLY, SEE DWG I-1552.
- FOR "FO" WORD MODIFIER ASSEMBLY, SEE DWG I-1699.
- APPLY LOCKTITE 271 TO GLAND STUDS WHEN INSTALLING INTO THE BODY. APPLIES TO BOTH VERSIONS, WITH STEAM JACKET AND WITHOUT.
- WHEN THE GLAND NUTS ARE BEING TIGHTENED DOWN, USE GAGE T069766 TO ENSURE EVEN PACKING COMPRESSION AND LEVEL COMPRESSION PLATE. THE TOP OF THE STUD SHOULD BE FLUSH WITH THE TOP OF THE GAGE.
- LIBERALLY APPLY DOW CORNING 111 LUBRICANT AND SEALANT, OR EQUIVALENT, TO THE SOCKET HEAD CAP SCREW (73) AND SET SCREWS (72) THREADS. INSTALL THE INSERT BY THREADING THE LUBRICATED SCREWS INTO THE BODY AND INSERT. WIPE AWAY EXCESS LUBRICANT FROM THE INSERT FACE. TEST AND PREPARE THE VALVE PER JST-02 APPENDIX A.

NO STEAM JACKET SHOWN

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UNLESS OTHERWISE NOTED DIMENSIONING, TOLERANCING, & DRAWING INTERPRETATION IS IN ACCORDANCE WITH ASME Y14.5M		JSA-01 JSA-10 JSA-17 JST-02 JMA-126		TITLE: ASSEMBLY 4" 9REL3, 9REL4, 9RELS FULL PORT LOW PROFILE BOTTOM UNLOADING RAILROAD VALVE		DRAWN PJD DATE 1/31/06	
ANGLES = ±5° FINISH REMOVE SHARP EDGES AND CORNERS TO 0.2 - 0.3 RADIUS OR CHAMFER, DIMENSIONS IN INCHES.		© 2016 Metso		SIZE D		DWG NO 5476	
				REV M		DATE 1/31/06	



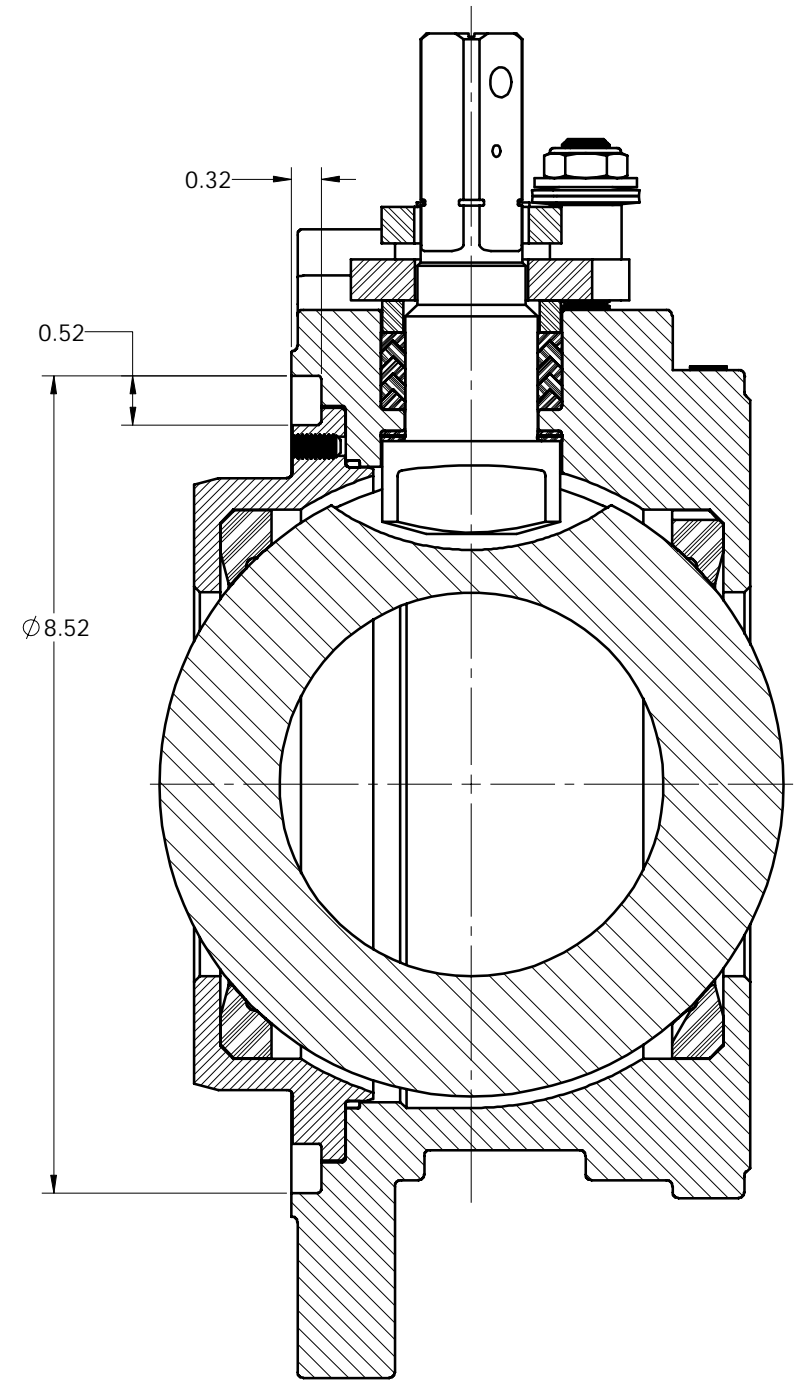
ITEM NO.	DESCRIPTION	QTY.
1	BODY	1
2	INSERT	1
3	BALL	1
5	STEM	1
7	SEAT	2
9	COMPRESSION RING	1
10	COMPRESSION PLATE	1
14	STUD	2
18	ESNA NUT	2
19	IDENTIFICATION TAG	1
26	POP RIVET	5
32	INDICATOR STOP	1
34	RETAINING RING	1
39	STOP SLEEVE	2
65	BODY SEAL	1
69	STEM SEAL	1
70	STEM BEARING	2
71	SECONDARY STEM SEAL	1
72	SET SCREW	3
73	SOCKET HEAD CAP SCREW	6
76	DISC SPRING	4
77	FLAT WASHER	2
78	STEAM JACKET RATING TAG	1

SEE NOTE 4 19

SEE NOTE 11 TYP.

SEE NOTE 11 TYP.

NO STEAM JACKET SHOWN



SECTION A-A

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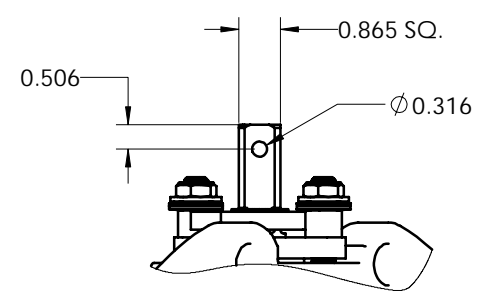
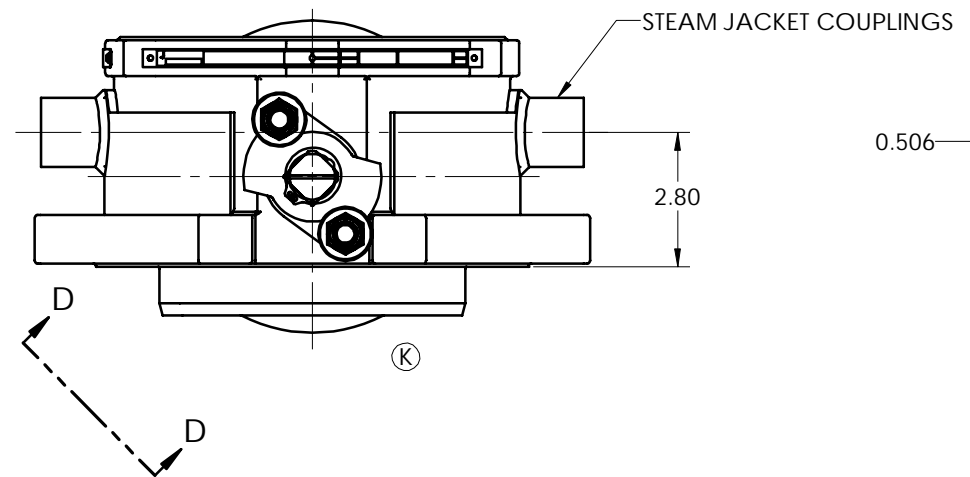
UNLESS OTHERWISE NOTED DIMENSIONING, TOLERANCING, & DRAWING INTERPRETATION IS IN ACCORDANCE WITH ASME Y14.5M

ANGLES = ±5° FINISH REMOVE SHARP EDGES AND CORNERS TO .02 - .03 RADIUS OR CHAMFER, DIMENSIONS IN INCHES.

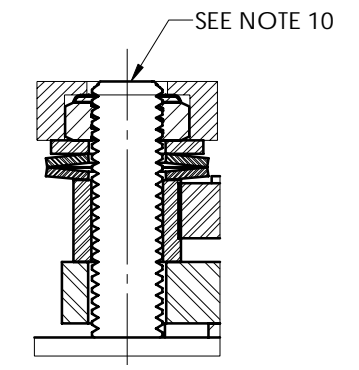
SPECIFICATIONS TO BE USED IN CONJUNCTION WITH THIS DRAWING		MAKE FROM PART NO.		INTERNAL	
JSA-01	JSA-10	JSA-17	JST-02	JMA-126	
TITLE: ASSEMBLY 4" 9REL3, 9REL4, 9RELS FULL PORT LOW PROFILE BOTTOM UNLOADING RAILROAD VALVE				APPVD. DRE	DATE 1/31/06
SIZE D	DWG NO. 5476	REV M			

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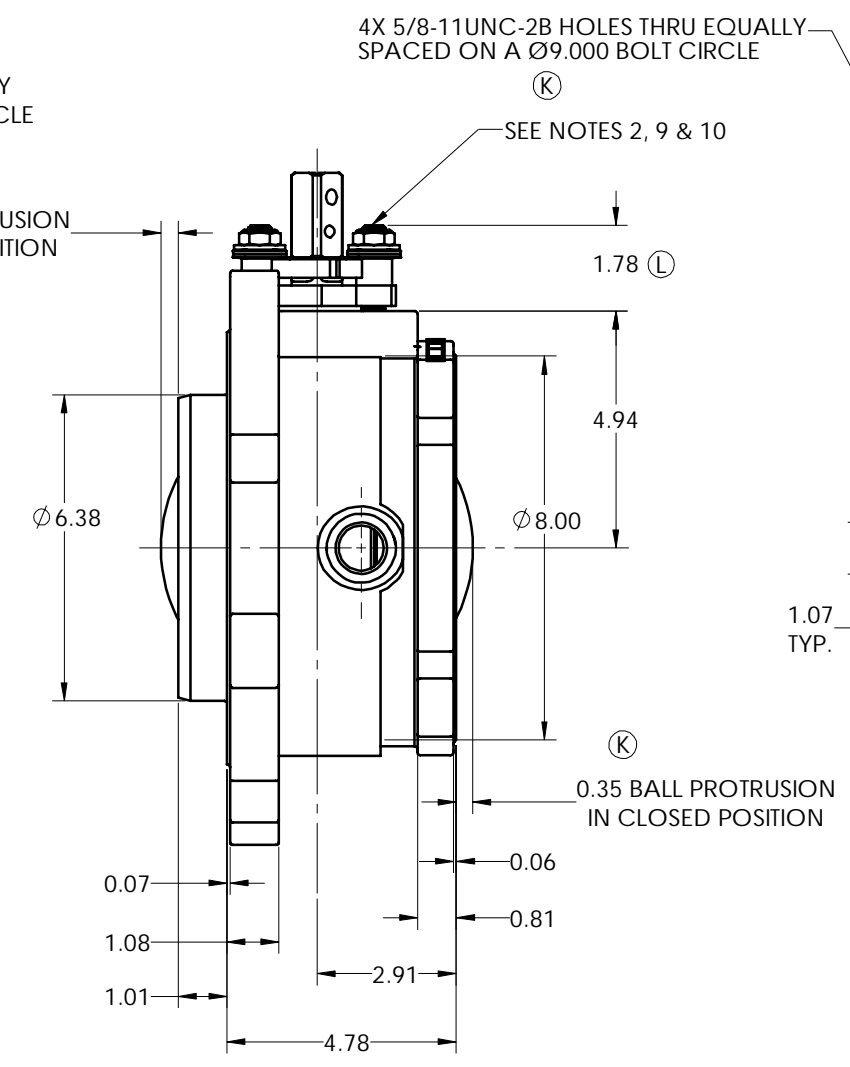
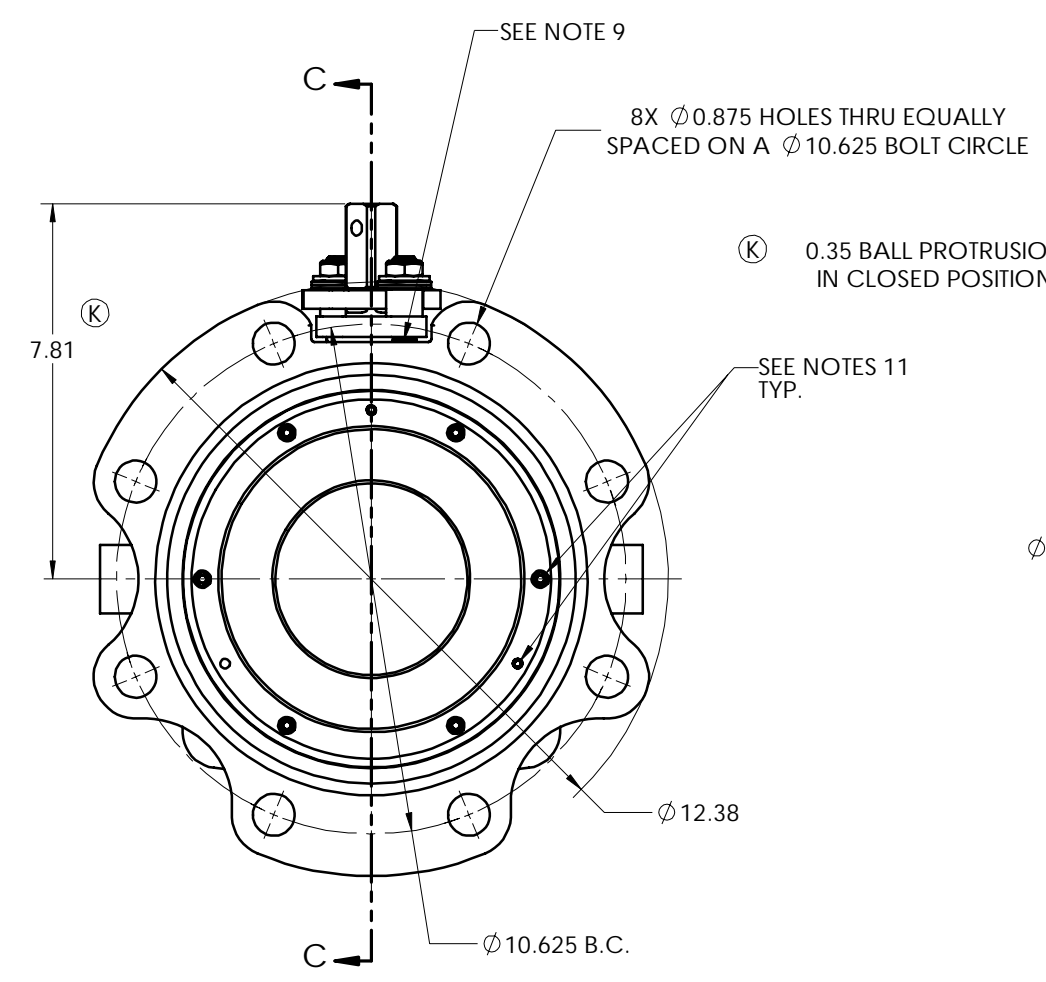
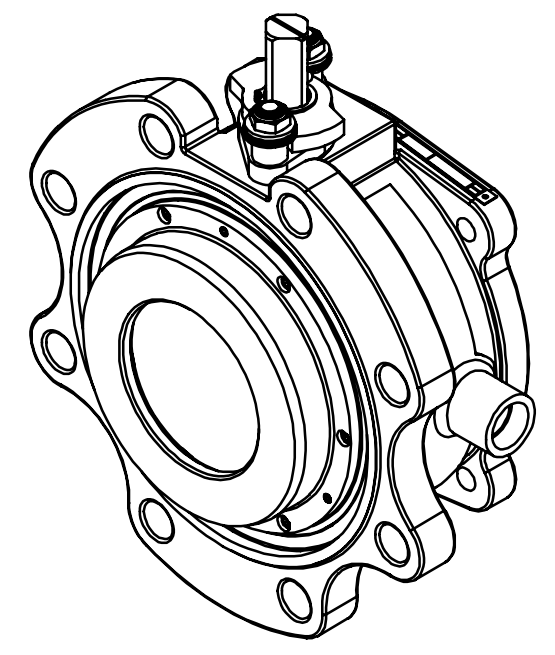




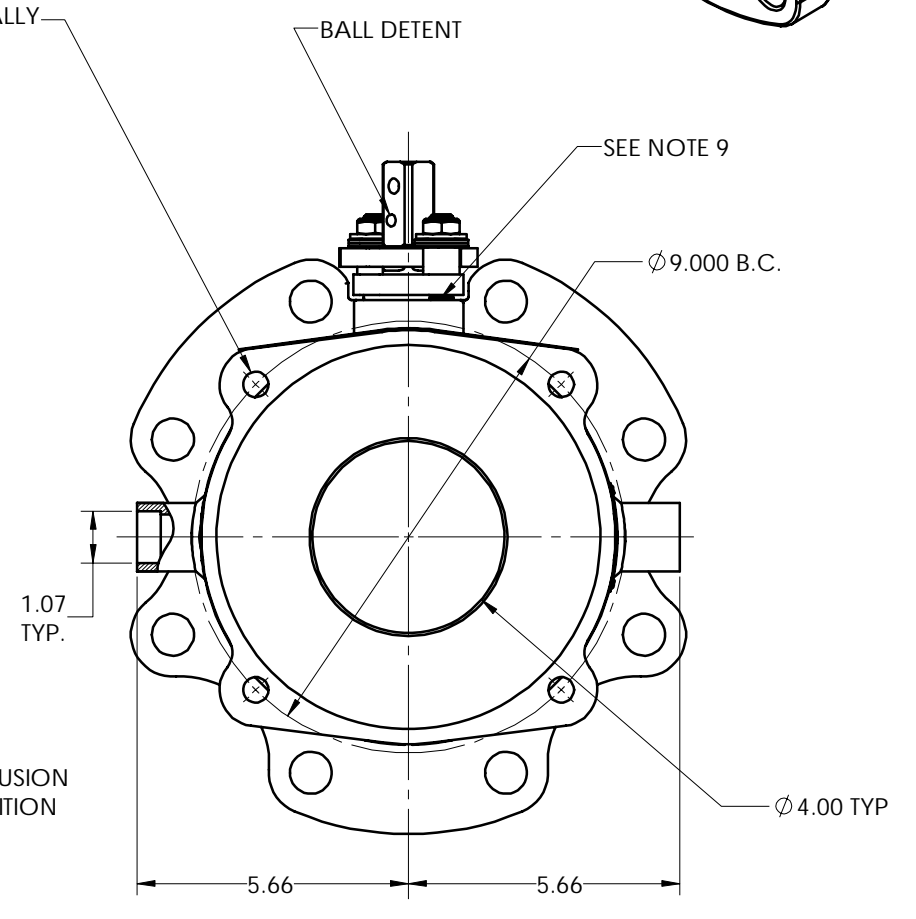
AUXILIARY D



REQUIRED FASTENER TORQUE
INSERT CAP SCREW
23 IN.-LBS.



WITH STEAM JACKET



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ANGLES = $\pm 5^\circ$ FINISH REMOVE SHARP EDGES AND CORNERS TO 0.2 - 0.3 RADIUS OR CHAMFER, DIMENSIONS IN INCHES.

250

SPECIFICATIONS TO BE USED IN CONJUNCTION WITH THIS DRAWING

MAKE FROM PART NO.

INTERNAL

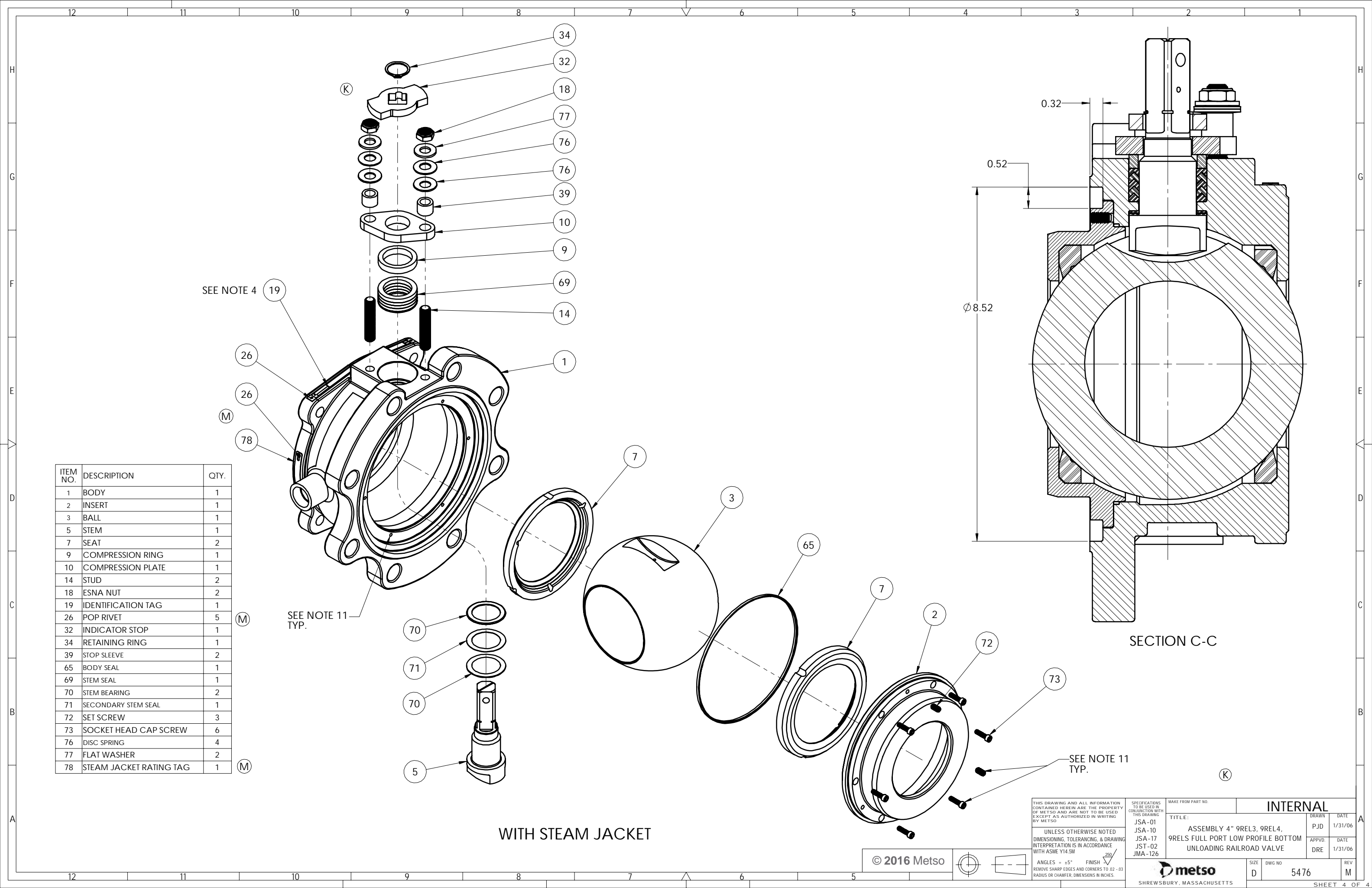
TITLE: ASSEMBLY 4" 9REL3, 9REL4, 9RELS FULL PORT LOW PROFILE BOTTOM UNLOADING RAILROAD VALVE

DRAWN	DATE
PJD	1/31/06
APPVD.	DATE
DRE	1/31/06

SIZE D DWG NO 5476 REV M

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ITEM NO.	DESCRIPTION	QTY.
1	BODY	1
2	INSERT	1
3	BALL	1
5	STEM	1
7	SEAT	2
9	COMPRESSION RING	1
10	COMPRESSION PLATE	1
14	STUD	2
18	ESNA NUT	2
19	IDENTIFICATION TAG	1
26	POP RIVET	5
32	INDICATOR STOP	1
34	RETAINING RING	1
39	STOP SLEEVE	2
65	BODY SEAL	1
69	STEM SEAL	1
70	STEM BEARING	2
71	SECONDARY STEM SEAL	1
72	SET SCREW	3
73	SOCKET HEAD CAP SCREW	6
76	DISC SPRING	4
77	FLAT WASHER	2
78	STEAM JACKET RATING TAG	1

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SHREWSBURY, MASSACHUSETTS

TO BE USED IN CONJUNCTION WITH THIS DRAWING

JSA-01
JSA-10
JSA-17
JST-02
JMA-126

MAKE FROM PART NO.

INTERNAL

TITLE:
ASSEMBLY 4" 9REL3, 9REL4,
9RELS FULL PORT LOW PROFILE BOTTOM
UNLOADING RAILROAD VALVE

DRAWN	DATE
PJD	1/31/06
APPVD.	DATE
DRE	1/31/06

SIZE D DWG NO 5476 REV M

SHEET 4 OF 4