

**AAR Manual of Standards and Recommended Practices  
Specifications for Tank Cars**

**APPLICATION FOR RENEWAL OF APPROVAL FOR PRESSURE RELIEF  
DEVICES, VALVES, CLOSURES, AND FITTINGS**

1. AAR APPROVAL No. E222103  
 2. Date of Application 3-29-2022  
 3. Previous AAR Approval E-129501  
 4. Applicant: Crane CP+E  
 5. Address: 4444 Cooper Road, Cincinnati, OH 45242  
 6. Drawing No. 26H900112000 7. Latest rev. -C 8. Date of latest rev. 10-27-2017  
 9. Description of device: Lined Ball Valve (Full Port) 10. Device ID No. XLB12A

**CERTIFICATION:** The subject device is **unchanged** from the previous approval, and conforms with the latest revision of AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

11. By:  Title: Front End Operations Manager

If device is **changed** since latest approval, fill in the following blanks

12. Reference Previous Drawing	New Drawing	If on Service Trial
No. _____ Rev. _____ Date _____	No. _____ Rev. _____ Date _____	S.T. No. _____
No. _____ Rev. _____ Date _____	No. _____ Rev. _____ Date _____	S.T. No. _____
No. _____ Rev. _____ Date _____	No. _____ Rev. _____ Date _____	S.T. No. _____

13. New drawing supersedes previous one  or does not obsolete it

CHANGES

REASONS FOR CHANGES

14. a. \_\_\_\_\_ a. \_\_\_\_\_  
 b. \_\_\_\_\_ b. \_\_\_\_\_  
 c. \_\_\_\_\_ c. \_\_\_\_\_  
 d. \_\_\_\_\_ d. \_\_\_\_\_  
 (if needed use supplemental sheet)

15. Normal operational effect of changes of device: \_\_\_\_\_  
 \_\_\_\_\_

16. Drawing submitted with this application: \_\_\_\_\_

**CERTIFICATION:** The above data is correct and conforms with AAR Specifications for Tank Cars, Appendix A. The device conforms with drawing listed above.

17. By: \_\_\_\_\_ Title: \_\_\_\_\_

APPROVAL AAR Tank Car Committee:

Date Approved: 5/11/2022



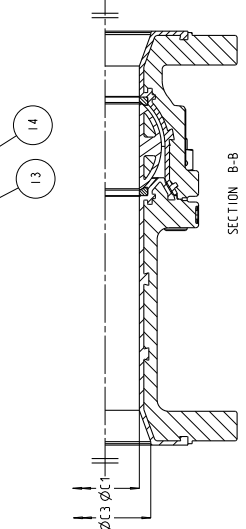
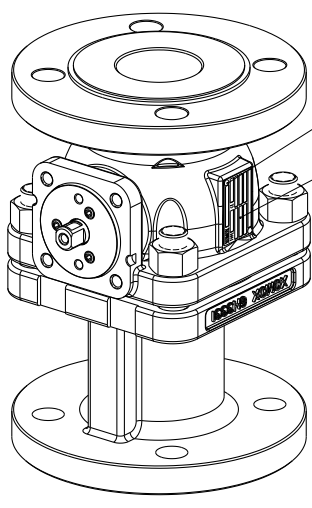
(Signature) on behalf of Committee

IMPLEMENTED 03/2021

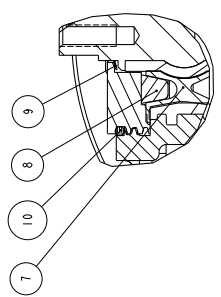
**Fig. 1.5 Form AAR 4-7 Application for Renewal of Approval for Pressure Relief Devices, Valves, Closures, and Fittings**

REV.	PCD #	DESCRIPTION	BY	CHK	APP / DATE
A	42/008/2011	Formal change, address (0803/1) (0803/1)	mmad	mmad	15/08/2011
B	42/009/2011	DN32 size eliminated	mmad	mmad	15/08/2011
C	42/004/2017	DN32 size eliminated	mmad	mmad	15/08/2011

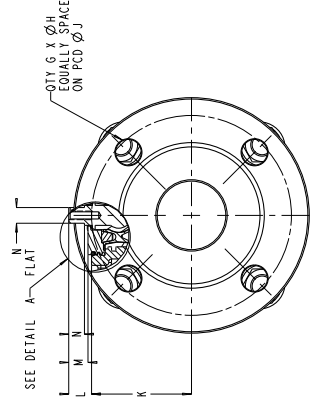
POS	DESCRIPTION	QTY	MATERIAL
1	BODY LINED MACHINED	1	DI EN-JS 1049/ASTM A395 60-40-18, PFA, PFA-AS, PVDF Lined
2	TAIL LINED MACHINED	1	DI EN-JS 1049/ASTM A395 60-40-18, PFA, PFA-AS, PVDF Lined
3	INTEGRAL BALL STEM LINED MACHINED	1	1.4470/ASTM A995-4A, PFA Lined
4	SEAT	2	PTFE
5	STUD	4	EN-JIS A4-70, ASTM A193 Grade B7
6	NUT BODY JOINT	4	EN-JIS A4-70, A194 Grade 2H
7	SK-SEAL	1	PTFE
8	WEDGE RING	1	T1.45K1 / AISI 321 SS
9	ANTISTATIC SPRING	1	17-7 PH SS
10	COVER SEAL	1	FRM
11	COVER	1	T1.45K1 / AISI 321 SS
12	SET SCREW	3	1.4301 / AISI 304 SS
13	LABEL	1	1.4301 AISI304-SS
14	LABEL TAG	2	T1.4301 AISI304-SS



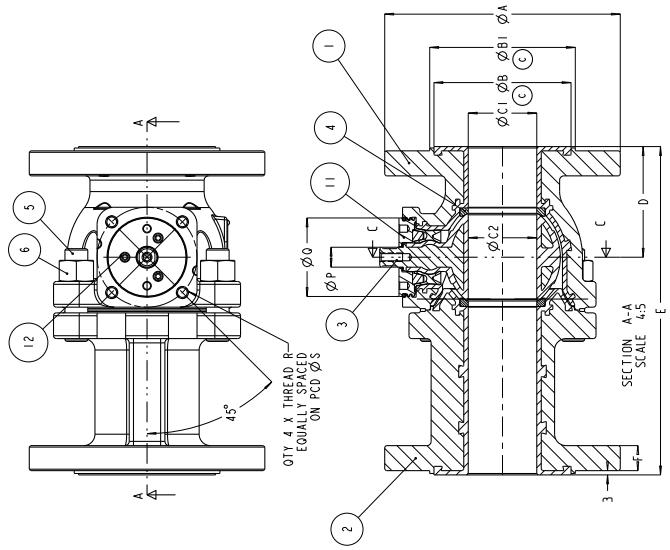
DO NOT SCALE DRAWING	
ALL DIMENSIONS IN INCHES UNLESS OTHERWISE SPECIFIED:	
XX	±0.03
XXX	±0.00
ANGULAR	±0.30
SIZE	CLASS
DN	sk039
CHK	mmad
APP	mmad
REL	mmad
GENERAL ARRANGEMENT DRAWING BARE STEM STANDARD	
CRANE	Z6H90012000
REV.	-C



DETAIL A  
SCALE 2:1



SECTION C-C



SECTION A-A  
SCALE 4:5

TYPE	DESCRIPTION	ØA	ØB	ØB1	ØC1	ØC2	ØC3	D	E	F	G	ØH	ØJ	K	L	M	N	N	ØP	ØØ	R	ØS
XLB13	1/2 inch ANSI LP	90	34.9	38.9	15	23	NA	55.3	130	14	4	1/2-130MC	60.3	48	14	11.5	9	12	35	M6	50	
XLB13	3/4 inch ANSI LP	100	42.9	46.9	20	23	NA	55.3	150	16	4	1/2-130MC	69.9	48	14	11.5	9	12	35	M6	50	
XLB12	1 inch ANSI SP	110	50.8	56.8	23	23	NA	54.3	172	12.7	4	0.630	79.4	48	14	11.5	9	12	35	M6	50	
XLB13	1 inch ANSI LP	110	50.8	56.8	23	23	NA	54.3	152	12.7	4	0.630	79.4	48	14	11.5	9	12	35	M6	50	
XLB42	1-1/2 inch ANSI SP RP	125	73	79	23	23	37	54.3	165	16	4	0.630	98.4	48	14	11.5	9	12	35	M6	50	
XLB12	1-1/2 inch ANSI SP	125	73	79	37	37	NA	70	165	16	4	0.630	98.4	62	16	13.5	11	14	55	M8	70	
XLB13	1-1/2 inch ANSI LP	125	73	79	37	37	NA	70	178	16	4	0.630	98.4	62	16	13.5	11	14	55	M8	70	
XLB42	2 inch ANSI SP RP	150	92.1	98.1	48	48	NA	77.5	178	17.5	4	0.748	120.7	62	16	13.5	11	14	55	M8	70	
XLB12	2 inch ANSI SP	150	92.1	98.1	48	48	NA	77.5	203	17.5	4	0.748	120.7	62	16	13.5	11	14	55	M8	70	
XLB13	2 inch ANSI LP	150	92.1	98.1	48	48	NA	77.5	203	22.3	4	0.748	120.7	62	16	13.5	11	14	55	M8	70	
XLB42	3 inch ANSI SP RP	190	127	133	48	48	NA	82.3	203	22.3	4	0.748	152.4	70	16	13.5	11	14	55	M8	70	
XLB12	3 inch ANSI SP	190	127	133	75	75	NA	85.5	203	22.3	4	0.748	152.4	70	16	13.5	11	14	55	M8	70	
XLB13	3 inch ANSI LP	190	127	133	75	75	NA	85.5	241	22.3	4	0.748	152.4	70	16	13.5	11	14	55	M8	70	
XLB42	4 inch ANSI SP RP	230	157.2	163.2	75	75	NA	97.5	228	22.3	8	0.748	190.5	100	22	19.5	17	22	70	M10	102	
XLB12	4 inch ANSI SP	230	157.2	163.2	98	98	NA	98.3	229	22.3	8	0.748	190.5	100	22	19.5	17	22	70	M10	102	
XLB13	4 inch ANSI LP	230	157.2	163.2	98	98	NA	98.3	292	22.3	8	0.748	190.5	100	22	19.5	17	22	70	M10	102	
XLB42	6 inch ANSI SP RP	280	214.9	220.9	145	145	NA	129.4	267	23.9	8	0.906	241	155	27	24.5	22	28	85	M12	125	
XLB12	6 inch ANSI SP	280	214.9	220.9	145	145	NA	129.4	267	23.9	8	0.906	241	155	27	24.5	22	28	85	M12	125	
XLB13	6 inch ANSI LP	280	214.9	220.9	145	145	NA	129.4	356	23.9	8	0.906	241	155	27	24.5	22	28	85	M12	125	
XLB42	8 inch ANSI SP RP	343	269.9	275.9	145	145	NA	128.4	292	27	8	0.874	298.4	155	27	24.5	22	28	85	M12	125	
		3.504	10.626	10.862	5.709	5.709	7.795	5.055	11.496	1.063	8	0.874	11.748	6.102	1.063	0.965	0.866	1.102	3.346	M12	4.921	