

APPLICATION FOR RENEWAL OF APPROVAL FOR VALVES AND FITTINGS

1. AAR APPROVAL No. E-197017 Rev A
2. Date of Application 7/13/2023
3. Previous AAR Approval E-197017
4. Applicant: McKenzie Valve & Machining LLC
5. Address: 145 Airport Road, McKenzie, TN 38201
6. Drawing No. See #12 7. Latest rev. See #12 8. Date of latest rev. See #12
9. Description of device: Flanged Vacuum Relief Valve 10. Device ID No. See Attached Table

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: _____

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

- | 12. Reference Previous Drawing | New Drawing | If on Service Trial |
|---|--|---------------------|
| No. <u>109613</u> Rev. <u>B</u> Date <u>7/02/2012</u> | No. <u>109613</u> Rev. <u>E</u> Date <u>6/23/2023</u> | S.T. No. <u>n/a</u> |
| No. <u>507941</u> Rev. <u>A</u> Date <u>9/11/2008</u> | No. <u>507941</u> Rev. <u>J</u> Date <u>12/15/2022</u> | S.T. No. <u>n/a</u> |
| No. _____ Rev. _____ Date _____ | No. <u>See Attached Table for New Drawings</u> | S.T. No. <u>n/a</u> |

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

CHANGES

REASONS FOR CHANGES

- | | |
|---------------------------------------|-----------------------------------|
| 14. a. <u>See the attached table.</u> | a. <u>See the attached table.</u> |
| b. _____ | b. _____ |
| c. _____ | c. _____ |
| d. _____ | d. _____ |
- (if needed use supplemental sheet)

15. Normal operational effect of changes of device: None

16. Drawing submitted with this application: All drawings listed in the attached table.

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: Roger Danzy Title: Product Engineer

APPROVAL AAR Tank Car Committee:

Date Approved: 8/8/2023


(Signature) on behalf of Committee

Updates to Approved Drawings					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
109611	BODY, FLANGED VACUUM RELIEF VALVE MACHINING	A	9/11/2008	Original Release	N/A
		B	6/29/2012	Added material table	Added materials.
		C	8/08/2013	Added holes for drive screws	Manufacturability.
		D	8/27/2021	Added 3 ¼-20 tapped holes	Cap bolting option.
		E	12/14/2022	Updated material specification	Clarification.
109613	STEM-BASE FLANGED MACHINING VACUUM RELIEF VALVE	A	9/11/2008	N/A - Approved on Previous Application	N/A
		B	7/2/2012	Changed 1.900 diameter to 1.884. Added table with line number and material.	To meet quad ring installation requirements. Added additional materials.
		C	8/13/2021	Changed 1.53 to 1.25. Removed section view within the side view.	To allow adjusting the set pressure of the valve. Clarity.
		D	12/14/2022	Updated material specifications for lines 01 to 04	Clarity
		E	6/23/2023	Added bar stock option to lines 01 to 04.	Option to use bar stock material

Updates to Approved Drawings					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
507941	VRV-075C-S4-F7	A	9/11/2008	N/A - Approved on Previous Application	N/A
		B	5/22/2012	Modified Name Plate. Modified Elastomer Table	To ensure valve marking is correct. To meet customer requirements
		C	1/26/2018	Modified Elastomer Table	To meet customer requirements
		D	6/27/2018	Added tack welding of cap/nameplate to body	To ensure cap/nameplate attachment to body in the event of failure of drive screws
		E	3/10/2020	Removed Note 3	Not required.
		F	2/18/2021	Transferred elastomer table to drawing 111731. Updated welding electrode type in Note 6.	Reduce drawing revisions for elastomers.
		G	5/18/2021	Revised Symbol 2 part number.	AAR Marking requirements.
		H	8/27/2021	Added bolting and seal wire for Symbol 2. Revised Notes 4 and 6.	Added option for bolting and sealing Symbol 2. Clarified Assembly and Testing requirements.
		J	12/15/2022	Revised Symbols 1 and 3 materials to CF8.	Correction.

New Drawings					
Drawing	Device ID / Model No.	Rev.	Date	Changes	Reason for Changes
114548	STEM-BASE VACUUM RELIEF VALVE BAR STOCK	A	6/23/2023	Original Release	N/A

Common Variations	
Model No.	Part Number
VRV-075C-S4-F7	507941
VRV-075C-S6-F7	509975
VRV-150C-S4-F7	509978
VRV-150C-S6-F7	509984
VRV-150C-T6P-F7	513816
VRV-200C-S4-F7	509979
VRV-200C-S6-F7	509985
VRV-250C-S4-F7	510861
VRV-250C-S6-F7	514961
VRV-300C-S4-F7	509980
VRV-300C-S6-F7	509986
VRV-400C-S4-F7	507948
VRV-400C-S6-F7	509987
VRV-075C-S4-F8	511317
VRV-075C-S6-F8	511318
VRV-150C-S4-F8	511319
VRV-150C-S6-F8	511320
VRV-250C-S4-F8	511173
VRV-250C-S6-F8	511174
VRV-300C-S4-F8	511697
VRV-300C-S6-F8	511698

Common Variations	
Model No.	Part Number
VRV-075C-S6-F10	511019
VRV-150C-S6-F10	510668
VRV-200C-S4-F10	511233
VRV-200C-S6-F10	511234
VRV-250C-S6-F10	513202
VRV-300C-S6-F10	510862
VRV-400C-S4-F10	511194
VRV-400C-S6-F10	511195
VRV-400C-T6P-F10	516181
VRV-400C-T6-F10	516962

VRV-150C-T6P-F10	515794
VRV-150C-T6P-F10-KO	515841