

AAR Manual of Standards and Recommended Practices
Sensors

S-920

APPENDIX I

APPENDIX I
TANK CAR SAFETY RELIEF DEVICE DATA GLOSSARY

Element ID (XML tag)	Name	Sample(s)	Text On Label R = Required O = Optional	Full Description
Pressure Relief Valve				
n/a	AAR Component Identification (CID)	ABCD1234567890	R	AAR Component Identification (CID) is the combination of companyCode and idNumber.
companyCode	Component ID Company Code	ABCD		4 characters. Component ID Company Code is assigned by Railinc to the C4a, C4m, and C5 tank car facility. Because this is a data field all by itself, it has already been parsed out and no trailing spaces are needed. This field must be included in the component registration data sent to Railinc for all pressure relief valves.
idNumber	Component ID Number	1234567890		10 digits max, no leading zeros. Because this is a numeric field all by itself, there is no need for the registering facility to add leading zeros. The Component ID Number is generated and assigned by the C4a, C4m, or C5 tank car facility. This field must be included in the component registration data sent to Railinc for all pressure relief valves.
D101	PRV Condition Code	1 or 3	O	1 numeric character max, no leading spaces. Code 1 - A new pressure relief valve that has been assembled or manufactured and qualified by a C4a / C4m tank car facility having service equipment code "S". Code 3 - A pressure relief valve that has been maintained and qualified by a C5 tank car facility having service equipment code "S". This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.
D102	AAR Tank Car Facility Code	ZYWX	R	4 alpha characters max, no leading spaces. The unique identifier assigned by the AAR to a C4a, C4m, or C5 tank car facility performing the activity for this registration event. This is the M-1003 QA Code and is synonymous with M-1002 Station Stencil. This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.
D103	Original Manufacturer (MFG) Facility Code	ABCD		4 alpha characters max, no leading spaces. Preserves the unique identifier assigned by the AAR to the original C4a or C4m tank car facility. This is the M-1003 QA Code and is synonymous with M-1002 Station Stencil. This data element is stamped or etched onto the body name plate. This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.
D104	PRV Base Model Number	A-3700 Series		14 characters max (alpha, numeric, & symbols), no leading spaces. The model number is generated and defined by the C4a or C4m tank car facility that correlates to the AAR design approval. This data element is stamped or etched onto the body name plate. This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.

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Element ID (XML tag)	Name	Sample(s)	Text On Label R = Required O = Optional	Full Description
Pressure Relief Valve (continued)				
D105	Manufacturer Part Number (Original)	1234567		<p>30 characters max (alpha, numeric, & symbols) no leading spaces. The part number is generated and defined by the C4a or C4m tank car facility and identifies valve attributes based on an assembly bill of materials. Attributes may include but are not limited to: material(s) of construction, set pressure, seal material(s), and mounting configuration.</p> <p>This data element may be stamped or etched onto the body name plate.</p> <p>This field is optional and may only be reported by the C4a or C4m tank car facility for inclusion with component registration data sent to Railinc.</p>
D106	Body Material	Aluminum		<p>32 characters max (alpha, numeric) no leading spaces. The valve body material is assigned by the C4a or C4m tank car facility and correlates to the AAR design approval.</p> <p>This field must be reported by the C4a or C4m tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D107	PRV Serial Number	1234567890		<p>16 characters max, no leading spaces.</p> <p>If the PRV was manufactured after December 31, 2003, a Serial Number will be defined and generated by the C4a or C4m tank car facility.</p> <p>This data element is stamped or etched onto the body name plate.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D108	PRV Built / Rebuilt Month	MM		<p>This is a 2 character date stamp with format MM.</p> <p>If PRV was manufactured prior to December 31, 2003 (before serialization), the month and year of manufacture or retest shall be entered in lieu of a serial number. This data is stamped or etched on the body nameplate.</p> <p>This field must be reported by the C5 tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D109	PRV Built / Rebuilt Year	YYYY		<p>This is a 4 character date stamp with format YYYY.</p> <p>If PRV was manufactured prior to December 31, 2003 (before serialization), the month and year of manufacture or retest shall be entered in lieu of a serial number. This data is stamped or etched on the body nameplate.</p> <p>This field must be reported by the C5 tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D110	PRV Set Pressure (Design Nominal)	280.5		<p>5 numeric characters max (including decimal), no leading spaces.</p> <p>This data element is stamped or etched onto the body name plate based on the AAR design approval.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>

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Pressure Relief Valve (continued)				
D111	AAR Approval Number	PRD-181109A	O	<p>11 characters max, alpha-numeric, no leading spaces.</p> <p>The Approval Number (original or renewal) is assigned by the AAR and is valid for 10 years. This must be the current approval number as recorded on either the AAR form 4-3 or 4-7.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D112	AAR Service Trial Number	ST-1234		<p>8 characters max, alpha-numeric, no leading spaces. Blank unless component is under service trial.</p> <p>The Service Trial number is assigned by the AAR for an in-service evaluation of a PRV for a defined period of time. This must be the service trial number as recorded on either the AAR forms 4-3, 4-4, 4-6 and/or 4-7.</p> <p>For only those pressure relief valves assigned to an AAR service trial, this field must be reported by the C4a or C4m tank car facility and be included in the component registration data sent to Railinc.</p>
D113	PRV Qualification Date (As Tested)	YYYY-MM-DD	O	<p>10 character date stamp with format YYYY-MM-DD on which the PRV was physically tested and qualified by the C4a, C4m or C5 tank car facility.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D114	PRV Start-to-Discharge Pressure (As Tested)	231.75		<p>6 numeric characters max, no leading spaces. This element reports the measured start-to-discharge pressure of the PRV tested and must be within the tolerance for the given set pressure in 49 CFR Part 179.15(b)(5).</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D115	PRV Vapor Tight Pressure (As Tested)	180.9		<p>6 numeric characters max, no leading spaces. This element reports the measured vapor-tight pressure of the PRV tested and must be within the tolerance for the given set pressure.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D116	O-Ring/Seal Material Applied (As Tested)	Viton A	R	<p>25 alpha-numeric characters max, no leading spaces. This element describes the material composition / type of the new elastomeric seals applied.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D117	AAR Group	RESERVED		<p>2 character max, alpha-numeric, no trailing spaces. Category assigned by AAR based on the design approval of the PRV.</p> <p>This field must be reported by the tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>
D118	Certifier ID	0123456789ABCDEFGHIJ		<p>20 characters max, alpha-numeric in any order, no leading spaces.</p> <p>The individual at the facility performing the test to the pressure relief valve and who certifies the test is in accord with the federal regulations and the AAR Section C-III Specifications for Tank Cars (M-1002).</p> <p>This field must be reported by the C4a, C4m, and C5 tank car facility and be included in the component registration data sent to Railinc for all pressure relief valves.</p>

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