

**Series BWEV4(CS) and BWEV6 (SS)
Full Bore Ball Valves (FNPT)
Seal Welded End Cap & Body**

Sizes: 1/2" through 3" (8 through 80mm)
BWEV4 - Carbon Steel
BWEV6 - Stainless Steel

Features

- End cap is seal welded to body
- Suitable for full range of liquids and gases
- Full port minimizes pressure drop
- Bottom loaded stem
- Pressure rated to 2,000 WOG (non-shock)
- Rated 125 psi for saturated steam
- Temperatures from 0 to 450°F
(See pressure/temperature chart)
- TFE seat, thrust washer and packing
- 304SS vinyl coated handle
- Excellent for low pressure drop throttling
and balancing applications
- Low operating torque
- Adjustable stem packing
- All valves have full material traceability
- Drilled and tapped mounting pad

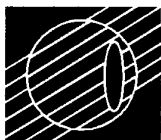
**Approved by the
Association of American Railroads
AAR #E979020**



BWEV6 - Stainless Steel

Specifications

Approved valves shall have bottom loaded stems, TFE seats and full porting. Valve shall be rated at 2000 WOG up to 1" size and 1500 WOG above 1" (non-shock), 125 psi saturated steam. Each valve shall be tested in the open and closed position by the manufacturer and in accordance with API 598. Valve must carry AAR approval number. Valve shall be SVF Flow Controls, Inc. model BWEV4 or BWEV6 with AAR #E979020.

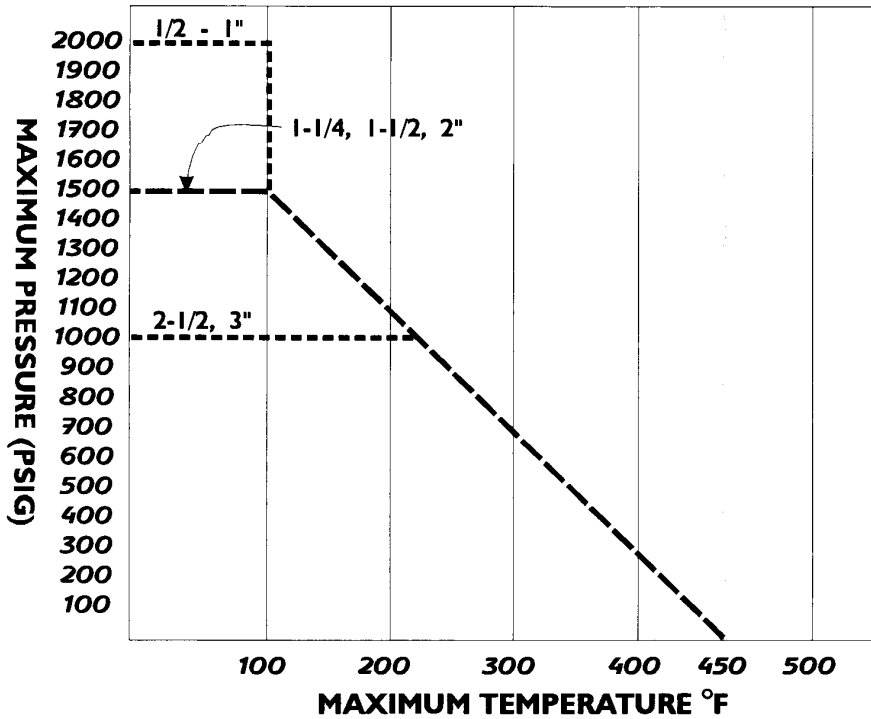


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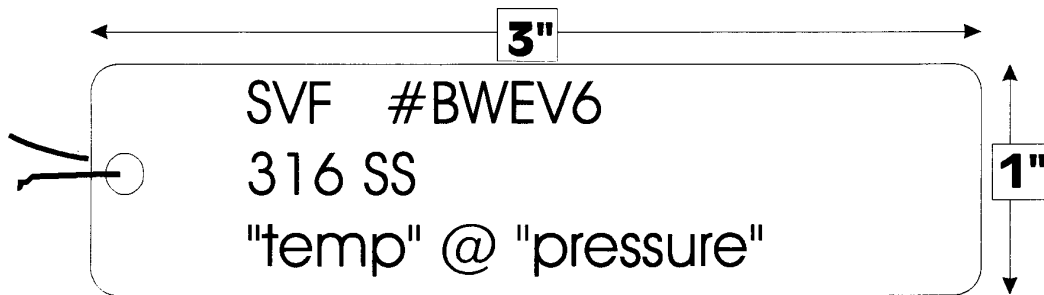
13560 Larwin Ct., Santa Fe Springs, CA 90670
Phone 800-783-7836 FAX 562-802-3111

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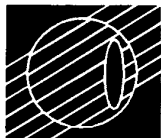
PRESSURE / TEMPERATURE DATA FOR TFE SEATS



All valve bodies and ends have heat numbers according to ASTM A351.
 MTR's for material traceability are available.



Stainless steel tag as per AAR requirements



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GENERAL PURPOSE RAILROAD TANK CAR APPLICATION

Fittings Assembly

The fittings assembly or top fittings are provided to allow a wide range of tasks to be performed from a central location on top of a tank car. Those tasks may include loading, unloading, tank pressurization and vapor recovery, gauging, sampling or taking temperature readings of the product.

The design of the top fittings arrangement can vary depending on the type of tank car, intended service, and customer preference. Examples of fitting arrangements for a specific car design can be seen on the drawing below.

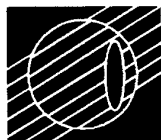
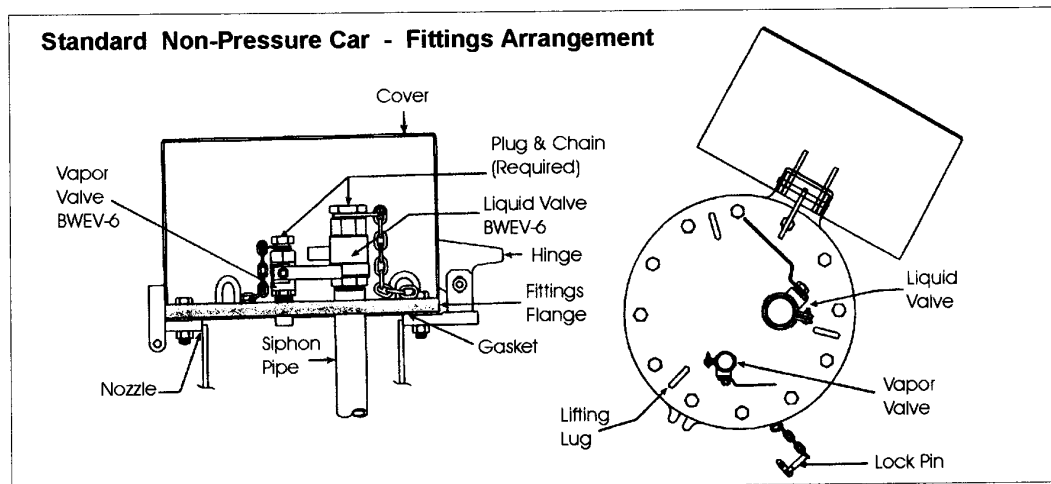
In general, there are distinct differences between the top fittings for the two major categories of tank cars: non-pressure and pressure cars.

Non-Pressure Car Fittings Arrangements

Non-pressure car fittings typically provide a means for unloading the car from the top, in addition to the bottom outlet.

A standard general purpose non-pressure car fittings arrangement consists of a vapor valve and a liquid valve connected to a siphon pipe extending to the bottom of the car. Both valves are attached to the fittings flange which is protected by a housing cover that can be locked shut.

To unload the car using the top fittings, pressure is applied through the vapor valve. The resulting pressure in the car forces liquid product up the siphon pipe and out the liquid valve. The top fittings can also be used to load the car, although it is more common to "splash" load through the manway.

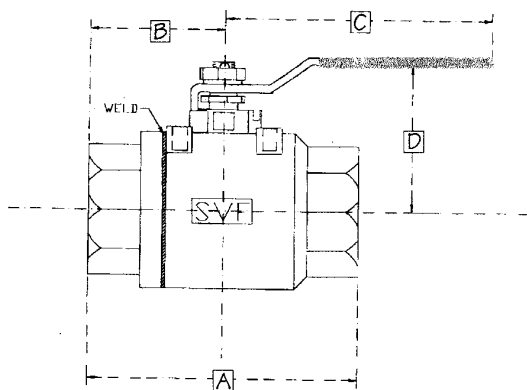


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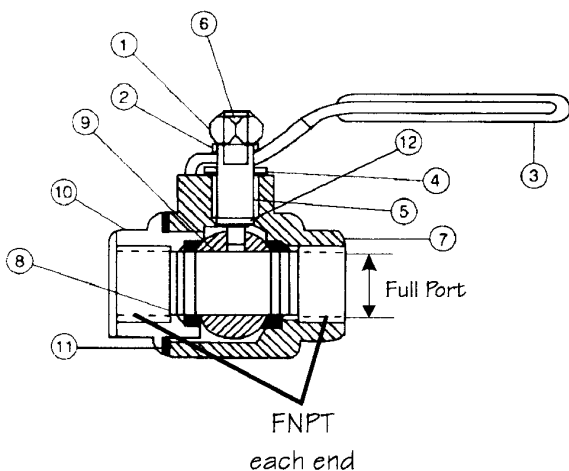
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Dimensions

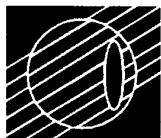


Valve Size	A	B	C	D	WT. (lbs)	Cv
1/2	2.56	1.28	5.12	2.36	0.75	12
3/4	2.91	1.45	5.12	2.52	1.75	32
1	3.47	1.74	6.50	2.80	2.33	57
1-1/4	4.02	2.00	6.50	3.07	3.75	80
1-1/2	4.33	2.17	7.48	3.39	5.00	104
2	4.92	2.46	7.48	3.74	8.75	240
2-1/2	6.36	3.18	9.84	5.12	15.65	320
3	7.00	3.50	9.84	5.83	26.00	580

Components



Item	Description	Material
1	Nut	AISI 304
2	Washer	AISI 304
3	Handle	AISI 304/Vinyl
4	Packing Gland	AISI 316
5	Stem Seal	TFE
6	Stem	AISI 316
7	Body	ASTM A351 Gr CF8M or Carbon Steel WCB
8	Seat	TFE
9	Ball	AISI 316
10	End Cap	ASTM A351 Gr CF8M or Carbon Steel WCB
11		
12	Body Seal	TFE
	Thrust Washer	TFE



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