



## AAR Registered 1/4" - 2" Loading / Unloading Liquid & Vapor Valves

2 Otter Court, Raymond, New Hampshire 03077 • Tel. (603) 895-4761 • FAX (603) 895-6785



### *Association of American Railroads*

Registered Facility  
Station Stencil GEMNH

**G**emini Valve is the ideal supplier for your 1/4" - 2" loading and unloading tank car liquid and vapor valves. Our manufacturing facility in Raymond, New Hampshire is registered by the AAR (Association of American Railroads) and meets the compliance requirements of 49 CFR 179.7 and Section B3.04 of M-1002, Specifications For Tank Cars. 76 Series AAR No. E9009012. 86 Series AAR No. E009023-A.

Gemini AAR Valves are manufactured from superior quality carbon & stainless steel barstock for exceptional durability under the toughest service environments.

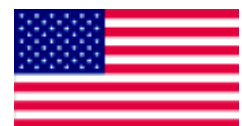
At Gemini Valve we pay attention to many details often overlooked by mass produced commodity valves. For example, each valve is bubble tested to ensure leak-tight performance. Our threads meet or exceed ANSI B1.20.1 L1 and L3 gauging requirements to facilitate a positive pipe joint seal even if the mating thread is not to specification.

We utilize Flex-Loc® locking stem nuts to ensure the handle remains firmly affixed to the valve. The reusable, all metal locknuts eliminate potential stem seal leaks resulting from excessive vibration or repeated cycling.

## FEATURES

- **Meets Compliance Requirements of 49 CFR 179.7 and Section B3.04 of M-1002, Specifications for Tank Cars**
- **Materials of Carbon Steel, 316 Stainless Steel.**
- **Self Compensating Valve Stem Seal Design Ensures Long, Leak-Tight Maintenance Free Service**
- **Flex-Loc® Brand Locking Handle Nut**
- **Full Thread Length Compliance with ANSI B1.20.1 Specification**
- **Bubble Tight Closure - each valve is bubble tested to ensure that all sealing points function properly**

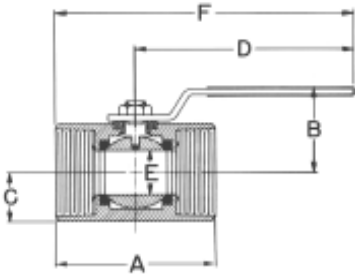
Our 76 Series is a reduced port one piece body, offered in sizes of 1/2" - 2". This series is our most commonly used valve for loading / unloading tank car applications where compact size and a single piece body design is of importance. For those applications where flow requirements are critical consider our 86 Series, standard port two piece body, offered in sizes of 1/4" - 2".



**Still Made In The USA**

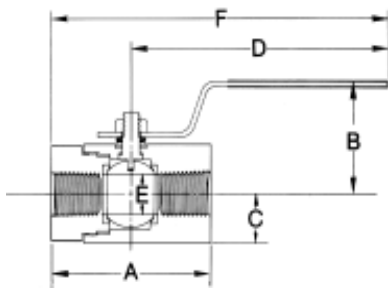
# Dimensions and Specifications

## 76 AAR Series



Series	Dimensions - Inches						Dimensions - Millimeters					
	A	B	C	D	E	F	A	B	C	D	E	F
76												
1/2	2.18	1.75	0.50	4.00	0.36	5.09	55.4	44.4	12.7	101.6	9.1	129.3
3/4	2.22	1.80	0.59	4.00	0.49	5.11	56.4	45.7	15.0	101.6	12.4	129.8
1	2.76	2.00	0.75	5.38	0.62	6.76	70.1	50.8	19.0	136.6	15.8	171.7
1-1/4	3.02	2.24	1.00	5.38	0.80	6.87	76.7	57.0	25.4	136.6	20.3	174.5
1-1/2	3.45	2.93	1.06	6.75	0.97	8.35	87.6	74.4	26.9	171.4	24.6	212.1
2	4.04	3.18	1.31	6.75	1.25	8.69	102.6	80.8	33.3	171.4	31.7	220.1

## 86 AAR Series



Series	Dimensions - Inches						Dimensions - Millimeters					
	A	B	C	D	E	F	A	B	C	D	E	F
86												
1/4 & 3/8	2.22	1.75	0.50	4.00	0.36	5.09	56.4	44.4	12.7	101.6	9.1	129.3
1/2	2.61	1.84	0.59	4.00	0.49	5.30	66.3	46.7	15.0	101.6	12.4	134.6
3/4	2.94	2.00	0.75	5.38	0.62	6.85	74.7	50.8	19.0	136.7	15.8	174.0
1	3.32	2.28	1.00	5.38	0.80	7.04	84.3	58.0	25.4	136.7	20.3	179.0
1-1/4	3.70	2.93	1.06	6.75	0.97	8.60	94.0	74.4	26.9	171.4	24.6	218.4
1-1/2	4.25	3.19	1.31	6.75	1.25	8.87	108.0	81.0	33.3	171.4	31.8	225.3
2	4.57	3.37	1.50	6.75	1.50	9.41	116.1	85.6	38.1	171.4	38.1	239.0

## Ratings

### Pressure:

20 Micron Vacuum to 720 psi (50.62Kg/cm<sup>2</sup>) C.W.P. (Cold Working Pressure) Non-Shock Service. To 150 psi (10.54Kg/CM<sup>2</sup>) for Saturated Steam.

### Temperature:

-50°F to +450°F (-45°C to +232°C)

## Materials

Carbon Steel, 316 Stainless Steel. 316 Stainless Steel Ball and Stem Standard.

**CAUTION:** Care must be taken to assure that the internal media and external environment are compatible with the valve materials.

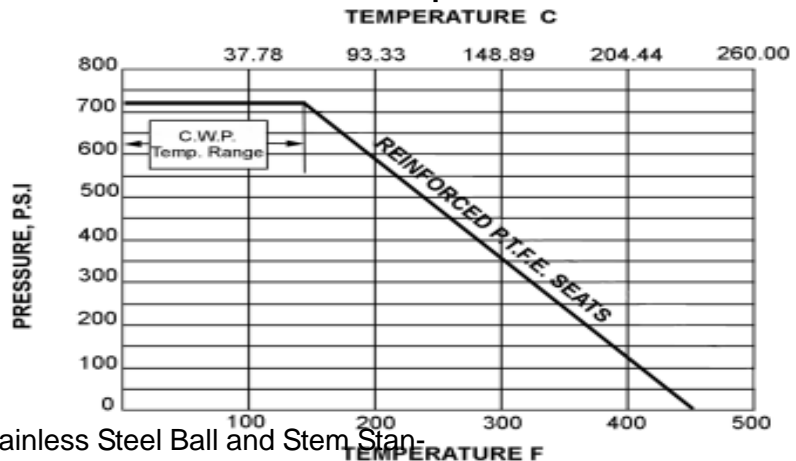
## How To Order

For 76 Series: Specify Size and Product Code, example 1" 76-4-RT-6-L

For 86 Series: Specify Size and Product Code with suffix S8 before L (lever handle code), example 1" 86-4-RT-6-S8-L

S8 suffix calls for endplug to be pinned or welded

### Pressure - Temperature Chart



LIMITED WARRANTY - Copy Available Upon Request.

Specifications subject to change without notice and without obligation on the part of the manufacturer.

Note: A small amount of lubricant is often used in the assembly of the internal components of the valve.



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