

# Tate Andale In-The-Line Vertical Vent Check Valves

## Description:

TATE In-The-Line Vertical Vent with Ball Check consists of heavy body, steel or bronze with ball check and valve seat and equipped with a fine mesh flame barrier. Connections screwed IPS, flanged ASA, MSS or Navy or welded as required. Hand cover secured to body by hex head screws.

The general design utilizes a corrosion resistant float ball which normally rests in open position at bottom of vent assembly. A submergence or wash will act to float the ball upwards directed by guides which are integral with the body. The ball is seated in machined insert seat at top of body and thus checks flow during period of the wash after which it automatically falls in the open position.

## Functions:

To protect tanks and bulkheads from pressure or vacuum buildup during loading and unloading as well as assure full pump efficiency during these operations where vent lines require in-the-line unit rather than terminal unit. (Such as in passenger deck area). This function assumes greater importance as tank loading is speeded up due to modern schedule requirements.

The ball check prevents contamination of tank fluid by water during rough sea.

TATE special fine mesh flame barrier protects tank gases from igniting when subject to deck flame. Vent is available less screen where low pressure vertical ball check only is required.

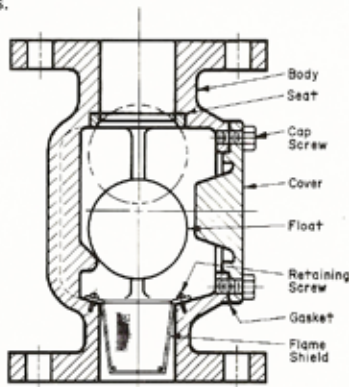
## Features:

1. Basic open area ratio 1½ to 1 at all points around the ball and through shields. This meets latest requirements of ABS, USMA, USCG, and Navy.
2. Parts readily accessible for inspection, cleaning and/or replacement by removal of exposed hex head screws. (See exploded parts below).
3. A copper ball furnished for long life and resistance to corrosion and abrasion. Other materials such as Monel or Stainless Steel furnished when required.
4. Heavy body and access cover designed to withstand full pipe line stresses.

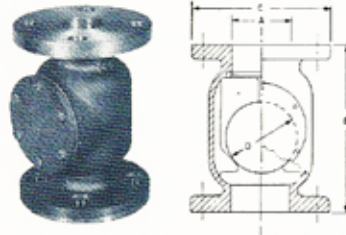
## Ordering Information:

When ordering or specifying mention number, material and pipe sizes (both inlet and outlet).

For special applications contact your nearest TATE field representative. TATE patterns are subject to alteration to suit new applications not presently indicated by our catalog items.



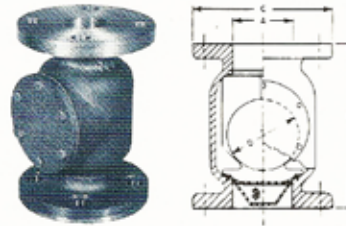
## FLANGED 52-90F Without Flame Barrier Shield



### Dimensions—inches

A-DIA	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
B	6 ¾	6 ¾	8	8 ¾	10 ¾	11	11	15 ¾	14 9/16	22
C-DIA	4 ¾	5	6	7	7 ½	8 ½	9	10	11	13 ½
D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
WGT	10	13	21	28	37	50	50	94	102	225

## FLANGED 52-95F With Flame Barrier Shield



### Dimensions—inches

A-DIA	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
B	6 ¾	6 ¾	8	8 ¾	10 ¾	11	11	15 ¾	14 9/16	22
C-DIA	4 ¾	5	6	7	7 ½	8 ½	9	10	11	13 ½
D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
WGT	10	13	21	28	37	50	50	94	102	225

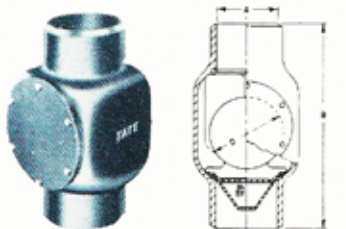
## BUTT WELD 52-90V (Steel Only)



### Dimensions—inches

A-DIA	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
B	6 ¾	6 ¾	8 ¾	8 ¾	10 ¾	11	11	15 ¾	14 9/16	22
D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
WGT	7	7	14	17	19	22	29	60	62	156

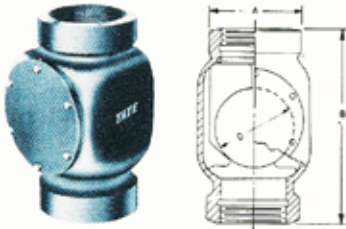
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### Dimensions—inches

A-DIA	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
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D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
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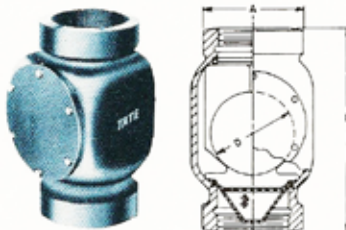
## IPS THREADED 52-90T



### Dimensions—inches

A-NPT	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
B	7 ¾	7 ¾	8 ¾	8 ¾	10 ¾	11	11	15 ¾	14 9/16	22
D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
WGT	8 ½	8 ½	16	19	21	25	35	65	72	171

## IPS THREADED 52-95T



### Dimensions—inches

A-NPT	1 ¼	1 ½	2	2 ½	3	3 ½	4	5	6	8
B	7 ¾	7 ¾	8 ¾	8 ¾	10 ¾	11	11	15 ¾	14 9/16	22
D-DIA	2	2	3	3	3 ½	4 ½	4 ½	6	7	9
WGT	8 ½	8 ½	16	19	21	25	35	65	72	171

\*APPROXIMATE