

94241

Hooded Free Vent

The Shand & Jurs® Model 94241 provides continuous atmospheric venting for storage tanks designed to operate at ambient pressure while incorporating enhanced weather protection. In tank designs where separate conservation devices handle pressure control, specifying engineers may require unrestricted airflow, along with improved protection from wind-driven rain and debris; the 94241 addresses this requirement with an extended hooded vent configuration.

Unlike regulated conservation vents, the 94241 contains no pallets, springs, or pressure-sealing components. The hooded construction shields the screened airflow path from direct precipitation and environmental exposure while maintaining open communication with the atmosphere. The absence of moving parts eliminates blowdown behavior, setpoint drift, or mechanical wear associated with pressure-controlled devices. Standard aluminum construction supports operating temperatures from -65°F to 250°F, with alternate materials available for corrosion-resistant service.

Available in multiple nominal sizes with ANSI Class 150 flanged connections, the 94241 integrates directly into atmospheric tank nozzles where open venting and environmental shielding are required.



Key Features

Extended Hood Geometry

Shields screened the airflow path from wind-driven rain and debris.

Open Atmospheric Design

Maintains unrestricted tank-to-atmosphere communication.

No Moving Components

Eliminates pallet wear, blowdown, or setpoint maintenance.

Screened Vent Opening

Limits insect and foreign material intrusion.

Direct Flanged Mounting

Integrates into standard ANSI Class 150 tank nozzles.

Corrosion-Resistant Material Options

Supports coastal and industrial exposure environments.

Benefits



IMPROVED ENVIRONMENTAL PROTECTION

Reduces moisture and debris entry in exposed installations.



CONTINUOUS TANK EQUALIZATION

Prevents unintended pressure accumulation in open systems.



REDUCED MAINTENANCE EXPOSURE

No regulated components requiring inspection or calibration.



ENHANCED OUTDOOR DURABILITY

Hooded configuration mitigates environmental exposure effects.



CLEAR APPLICATION BOUNDARY

Distinguishes from pressure-regulated conservation vent service.



STRAIGHTFORWARD SPECIFICATION

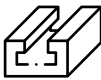
Simplifies engineering review in non-pressurized tank designs.

Available Options



Carbon steel or 316 stainless steel body construction

Provides corrosion resistance or structural durability depending on the service environment.



316 stainless steel hood option

Improves resistance to coastal or chemical exposure environments.



Stainless steel or galvanized vent screens

Heavier-duty alternative to standard aluminum construction.



316 stainless steel hardware package

Provides a full corrosion-resistant assembly for aggressive environments.



API-650 flange drilling (20" and 24" sizes)

Allows direct installation on large atmospheric storage tanks in accordance with API tank nozzle standards.



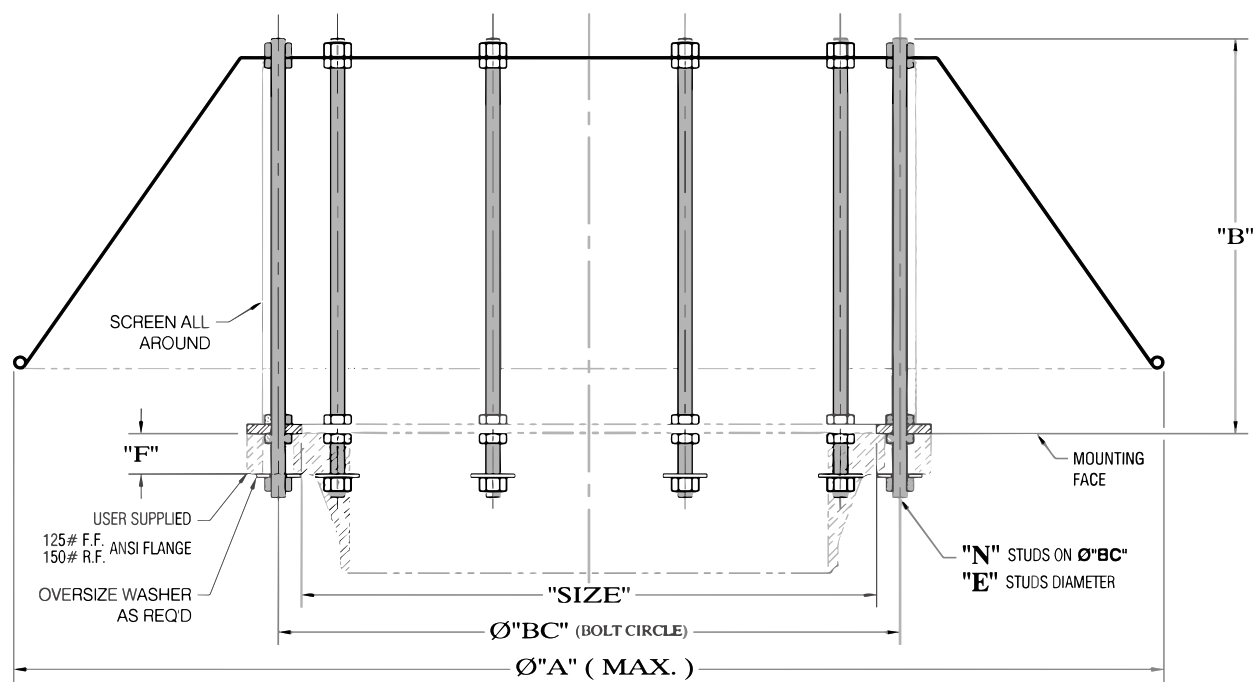
EN1092-1 or JIS flange drilling

Supports installation in international tank and process equipment standards.

Key Performance Data

Parameter	Value
Device Type	Atmospheric Free Vent (Hooded)
Pressure Regulation	None — continuous atmospheric vent
Sealing Method	None
Loading Method	None
Nominal Sizes	2"–30"
Connection Types	ANSI 125/150 FF • API-650 (20" & 24") • EN1092-1 or JIS optional
Body Materials	Aluminum • Carbon Steel • 316 Stainless Steel
Hood Materials	Aluminum • 316 Stainless Steel
Screen Materials	Galvanized Steel • Stainless Steel • 316
Hardware	Stainless Steel • 316 Stainless Steel
Temperature Range (Aluminum)	–65°F to 250°F
Temperature Range (Carbon Steel)	–20°F to 350°F
Temperature Range (316 Stainless Steel)	–65°F to 350°F

Dimensions



125/150 lb. ANSI Class Flange

Dimensions (2" - 30")						
Size	A	B	BC	N	E	F
2"	13 9/16	4 7/8	4 3/4	4	3/8	3/4
3"	13 1/2	4 1/4	6	4	3/8	15/16
4"	14 1/2	4 3/8	7 1/2	4	3/8	15/16
6"	* 16 1/2	* 4 7/8	9 1/2	4	1/2	1
8"	20 1/2	6 3/8	11 3/4	4	1/2	1 1/8
10"	27 3/4	7 3/8	14 1/4	6	1/2	1 3/16
12"	* 29 1/4	9 5/8	17	6	1/2	1 1/4
16"	46 1/4	16 15/16	21 1/4	8	5/8	1 7/16
18"	46 1/4	16 15/16	22 3/4	8	5/8	1 9/16
20"	46 1/4	16 15/16	25	10	5/8	1 11/16
24"	46 1/4	15 1/8	29 1/2	10	5/8	1 7/8
30"	59 7/8	15 1/8	36	14	3/4	2 15/16

* Dimensions shown are for aluminum hood option only.

Model Number Selection

The model number will consist of a base number 94241 followed by 5 digit numbers. These digits will represent 3 option tables.

94241 - AB - C - DE

Ordering Information

Specify:

1. Model 94241 Free Vent
2. Size Vent Required

Table AB - Size & Mounting Flange

Option AB	Description (Bolt Pattern)
04	2" ANSI 125 lb. Flat Face Flange
05	3" ANSI 125 lb. Flat Face Flange
06	4" ANSI 125 lb. Flat Face Flange
07	6" ANSI 125 lb. Flat Face Flange
08	8" ANSI 125 lb. Flat Face Flange
09	10" ANSI 125 lb. Flat Face Flange
10	12" ANSI 125 lb. Flat Face Flange
11	16" ANSI 125 lb. Flat Face Flange
12	18" ANSI 125 lb. Flat Face Flange
13	20" ANSI 125 lb. Flat Face Flange
14	24" ANSI 125 lb. Flat Face Flange
15	30" ANSI 125 lb. Flat Face Flange
45	20" API-650 Flange
46	24" API-650 Flange

Table C - Base & Hood Material

Option C	Base Material	Hood Material
0	Steel	Aluminum
1	Aluminum	Aluminum
2	316 SS	316 SS
3	Steel	316 SS

Table DE - Hardware & Screen Material

Option DE	Vent Size	Hardware Material	Screen Material
11	2" - 12"	Stainless Steel	Galvanized Steel
12	16" - 20"		
13	24" - 30"		
21	2" - 12"	Stainless Steel	Stainless Steel
22	16" - 20"		
23	24" - 30"		
31	2" - 12"	316 SS	316 SS
32	16" - 20"		
32	24" - 30"		

Summary

The Shand & Jurs® 94241 Hooded Free Vent provides continuous atmospheric venting with enhanced environmental shielding for outdoor storage applications. Its extended hood geometry protects the screened airflow path from precipitation and debris while maintaining unrestricted tank equalization. The 94241 offers specification-ready open venting, with environmental exposure as a primary design consideration.

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This document is for information purposes only. All designs subject to change. Certified dimensions, specifications, and performance data available upon request