

Type SB Washdown Nozzle, Flush Deck United States Navy

General Description

The TYCO Type SB Flush Deck Nozzles are washdown nozzles for use on United States Navy ships. They are welded into position flush with the deck surface. The inlet to the nozzle is sized for welding or brazing to 1/2 inch (DN15) pipe.

The Flush Deck Nozzles have a Ball that normally rests in the exit orifice to prevent debris from falling into it. When water is flowing, the Ball is lifted up and remains centered by the combination of the threaded insert and the inside edges of the three webs. The separable Truss Head Machine Screw and Fender Washer supplied with the Type SB Flush Deck Nozzles are used to temporarily cover the nozzle when the deck is being restored.

The Type SB Replacement Parts Kit that includes a Web with Modified Threaded Insert, Ball, Modified Insert, Truss Head Machine Screw, and Fender Washer is illustrated in Figure 2. A Threaded Insert Installation Tool is also available.

Technical Data

Approvals

The Type SB Flush Deck Nozzles and related items are manufactured in compliance with NAVSEA Drawing No. 803-1385828. They have been qualified to the High Impact Shock requirements of MIL-S-901C (Navy), Grade A, Hull Mounted, Class I, Light Weight Test.

Discharge Coefficient

5.1 GPM/psi^{1/2} (73,4 LPM/bar^{1/2})

Water Discharge Pattern

The approximate water discharge pattern at zero wind velocity is shown in Figure 3, for reference purposes only. Nozzle spacing is to be in accordance with the applicable standards of the Naval Sea Systems Command.

The recommended range of flowing pressure at the Nozzle inlet is 30 to 50 psi (2,1 to 3,4 bar).

Thread Connection

1/2 in. (DN15) welding or brazing

Markings

Stainless Steel Nozzle:
SS-SB-110-.438

Replacement Stainless Steel Web:
SS SB

Weight

Stainless Steel: 1.0 lb (0,45 kg)



Physical Characteristics

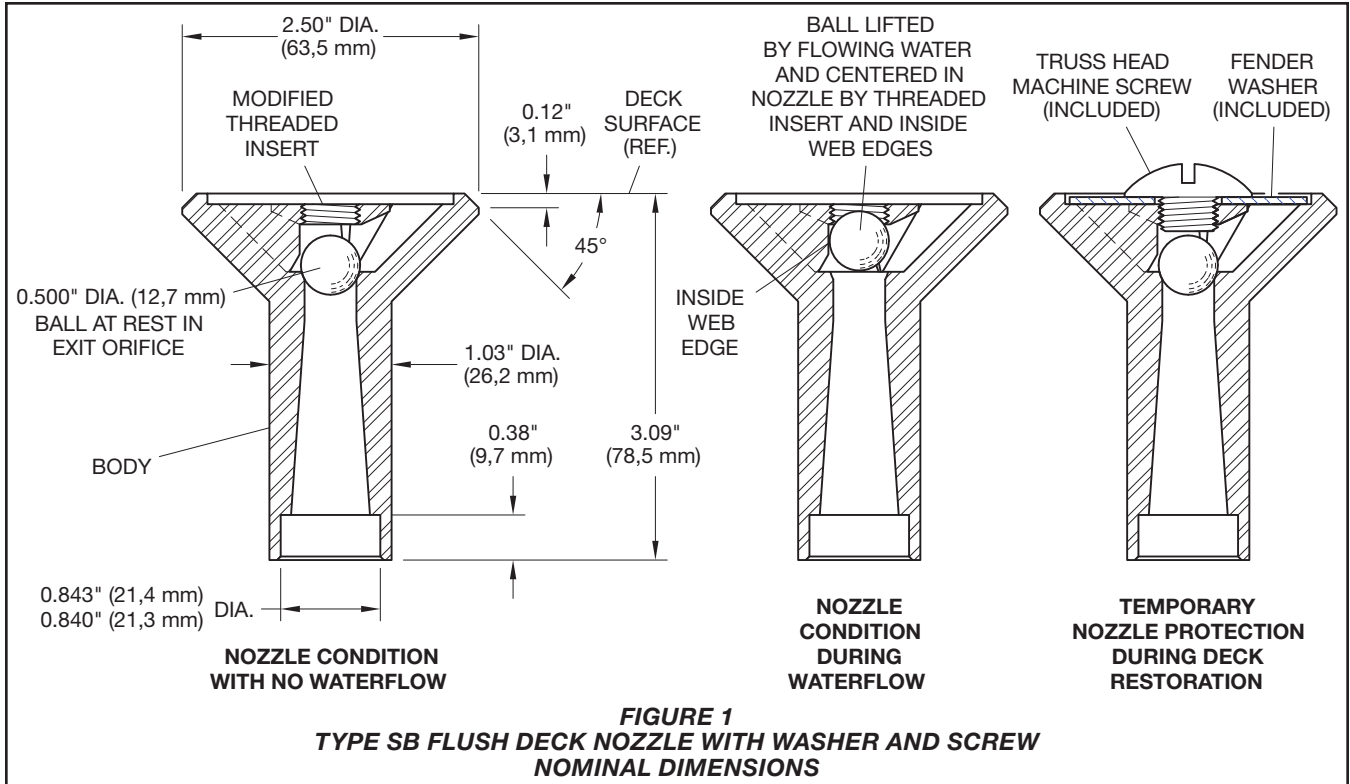
The Body of the stainless steel Nozzle and the stainless steel Replacement Web are cast from austenitic stainless steel per ASTM A 351 (UNS J92800). Maximum carbon content is 0.03 percent for weldability. The castings are solution annealed for maximum corrosion resistance.

- The Ball is Type 302 stainless steel.
- The Modified Threaded Insert is stainless steel per AMS7245.
- The Truss Head Machine Screw is a Type 18-8 stainless steel.
- The Fender Washer is plated (zinc or cadmium) SAE 1008-1020 carbon steel.

IMPORTANT

Refer to *Technical Data Sheet TFP2300* for warnings pertaining to regulatory and health information.

Always refer to *Technical Data Sheet TFP700* for the "INSTALLER WARNING" that provides cautions with respect to handling and installation of sprinkler systems and components. Improper handling and installation can permanently damage a sprinkler system or its components and cause the sprinkler to fail to operate in a fire situation or cause it to operate prematurely.



Installation

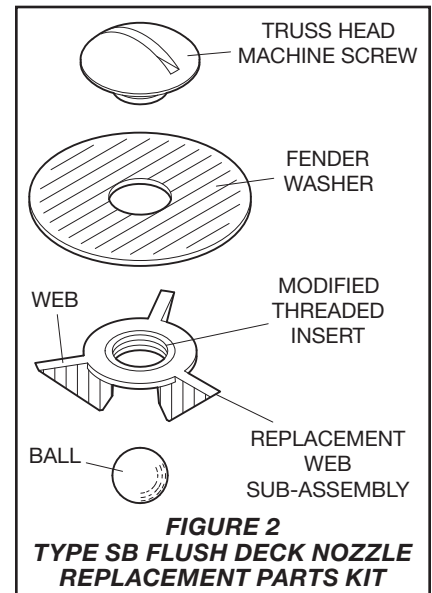
The TYCO Type SB Flush Deck Nozzles must be installed in compliance with the standards of the Fire Protection Branch of the Ship Systems Directorate, Naval Sea Systems Command.

Care and Maintenance

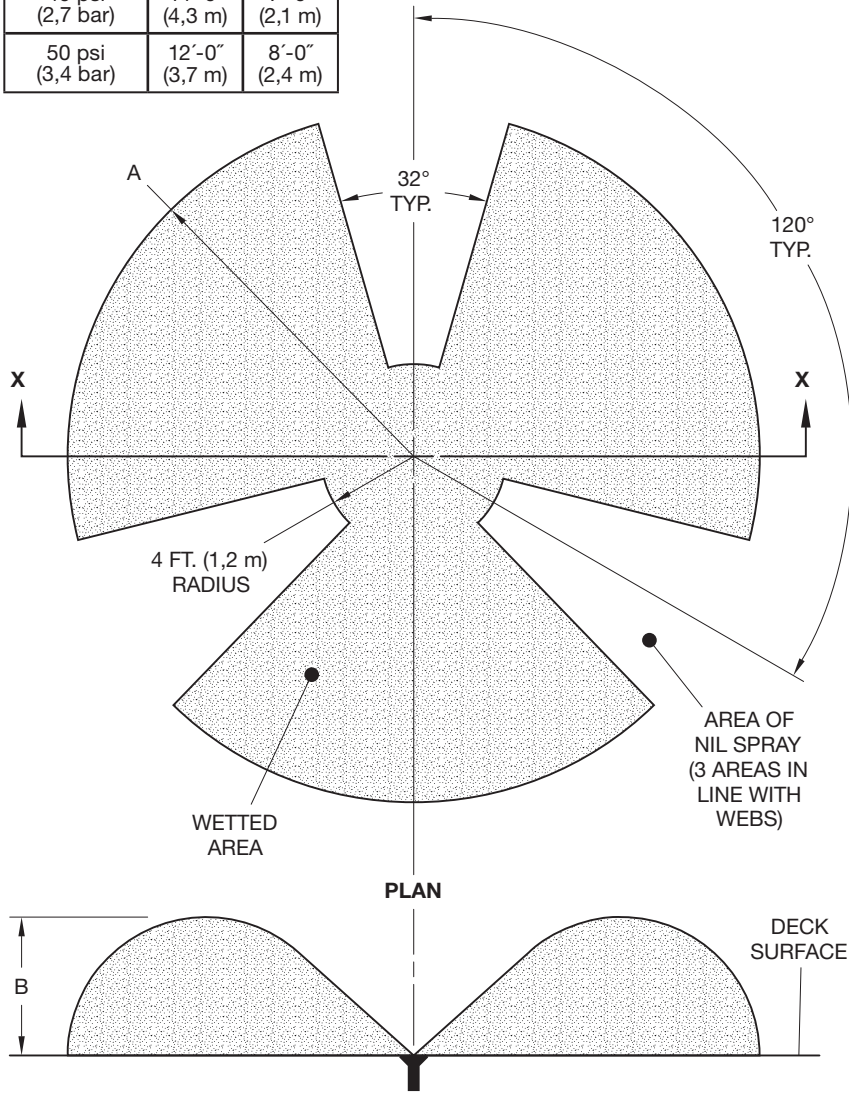
The TYCO Type SB Flush Deck Nozzles require regularly scheduled inspection and maintenance. For instructions, refer to the Preventative Maintenance System of the United States Navy.

If replacement of the Modified Threaded Insert is required, make certain that the Ball is in place and that the replacement Modified Threaded Insert is installed such that its upper edge is approximately 1/32 inch (0,8 mm) below the top face of the Web.

If a Replacement Web must be installed, grind out the old the Web flush with the inside conical surface of the nozzle Body and weld the three webs of the replacement in place, so that the Fender Washer sits flush within the recess at the top of the Body.



Nozzle Inlet (Flowing) Pressure	A Radius	B Height
30 psi (2,0 bar)	15'-0" (4,6 m)	6'-0" (1,8 m)
40 psi (2,7 bar)	14'-0" (4,3 m)	7'-0" (2,1 m)
50 psi (3,4 bar)	12'-0" (3,7 m)	8'-0" (2,4 m)



**FIGURE 3
WATER DISCHARGE PATTERN
AT ZERO WIND VELOCITY**

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

SS Type SB Nozzle with Accessories

Specify: SS Type SB Flush Deck Nozzles with Washer and Screw, P/N 49-556-1-012

SS Type SB Nozzle Replacement Parts Kit

Specify: SS Type SB Flush Deck Nozzle Replacement Parts Kit, P/N 91-556-1-001

Threaded Insert Installation Tool

Specify: Threaded Insert Installation Tool for Type SB Flush Deck Nozzle, P/N 91-556-1-004

