

Model TNIM Nitrogen Inerting Manifold

General Description

The TYCO Model TNIM Nitrogen Inerting Manifold is designed for use in implementing the Wet Pipe Nitrogen Inerting (WPNI) process for controlling oxygen corrosion in wet pipe fire sprinkler systems. The Nitrogen Inerting Manifold is designed to be installed inline between the house/plant nitrogen supply and the sprinkler system riser in wet pipe sprinkler systems providing the means to safely deliver nitrogen gas to fire sprinkler systems during the Wet Pipe Nitrogen Inerting (WPNI) process.

The Nitrogen Inerting Manifold uses ¼ in. quick disconnects on the high pressure rubber hose to connect the nitrogen gas supply to the wet pipe fire sprinkler system through the Nitrogen Inerting Port. The Nitrogen Inerting Manifold includes a pressure regulator to control the nitrogen flow during the deployment of the WPNI process and prevent over-pressurization of the fire sprinkler system.

The Nitrogen Inerting Manifold is a self-contained wall mounted unit that includes the following components:

- Single point nitrogen entry – ½ in. NPT Female
- Single point nitrogen discharge – ¼ in. Quick Disconnect
- One pressure regulator to regulate nitrogen delivery pressure to the discharge connection

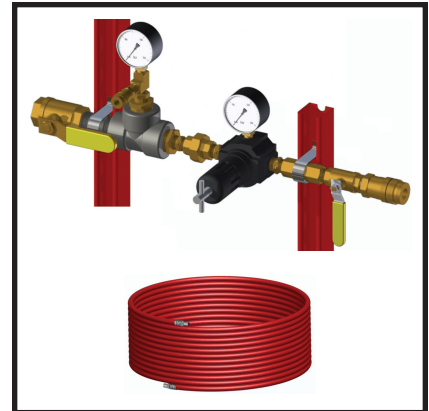
The Nitrogen Inerting Manifold is designed to be used in conjunction with the following components as part of the complete TYCO Wet Pipe Nitrogen Inerting (WPNI) system:

- House/plant nitrogen source or with TYCO Nitrogen Generator
- Riser-mounted TYCO Model TNIP Nitrogen Inerting Port

NOTICE

The TYCO Model TNIM Nitrogen Inerting Manifold described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may impair the performance of the related devices.

The owner is responsible for maintaining their fire protection system and devices in proper operating condition. Contact the installing contractor or product manufacturer with any questions.



Technical Data

Specifications

Dimensions

18 in. (W) x 10 in. (H) x 8 in. (D)
(457,2 mm (W) x 254mm (H) x 203,2 mm (D))

Weight

8 lb (3,6 kg)

Nitrogen/air connection

Inlet: ½ in. NPT Female
Outlet: ¼ in. Quick Disconnect

Hose Size

3/8 in. x 25 ft (9,5 mm x 7,6 m).

Hose Material

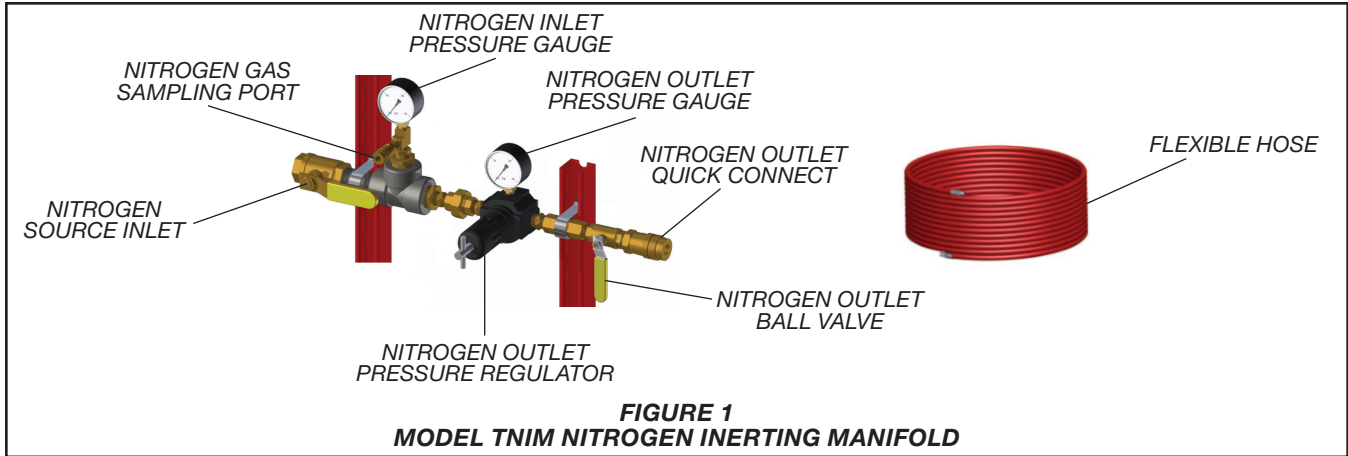
Rubber

Hose Pressure Rating

300 psig (21 bar)

IMPORTANT

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



Operation

The ball valves on the TYCO Model TNIM Nitrogen Inerting Manifold are to remain in the closed position until deployment of the WPNI process is needed.

- Verify all ball valves on the Nitrogen Inerting Manifold and the ball valve on the Nitrogen Inerting Port installed on the fire sprinkler riser(s) are in the closed position.
- Connect the flexible hose to a quick connect on the outlet of the Nitrogen Inerting Manifold.
- Connect the flexible hose to a quick connect on the Nitrogen Inerting Port installed on the fire sprinkler riser where the WPNI process is to be deployed.
- Open the ball valve at the inlet of the Nitrogen Inerting Manifold.
- Deploy WPNI process as defined in the TYCO WPNI Protocol.
- Verify all ball valves on the Nitrogen Inerting Manifold and the ball valve on the Nitrogen Inerting Port installed on the fire sprinkler riser are in the closed position.
- Disconnect the flexible hose from the quick connect on the Nitrogen Inerting Port installed on the fire sprinkler riser where the WPNI process has been deployed.
- Disconnect the flexible hose from the quick connect on the outlet of the Nitrogen Inerting Manifold.

Installation

The TYCO TNIM Nitrogen Inerting Manifold must be installed in accordance with this section.

Step 1. Mounting the Nitrogen Inerting Manifold

The Nitrogen Inerting Manifold is designed to be mounted directly to the wall at the installation location. Several factors should be considered in choosing the proper mounting location for the Nitrogen Inerting Manifold:

- Access to the nitrogen source (nitrogen generator or house/plant nitrogen)
- Access to the sprinkler risers being supplied from the Nitrogen Inerting Manifold
- Clearance at the front of the unit to operate pressure regulator

The Nitrogen Inerting Manifold includes pre-punched holes for wall mounting using standard anchors. Ensure the wall is structurally sound to support the weight of the manifold.

Step 2. Plumb the Inlet Nitrogen Supply Line

The nitrogen delivery supply line from the nitrogen generator or house/plant nitrogen supply is to be connected directly to the inlet connection of the Nitrogen Inerting Manifold.

Note: The minimum line size is ½ in.

Step 3. Connect the Outlet Nitrogen Supply Line

The nitrogen outlet of the Nitrogen Inerting Manifold is to be connected to the Nitrogen Inerting Port injection port on the fire sprinkler riser through the 3/8 in. flexible hose only when deploying the WPNI process. Leave flexible hoses disconnected and outlet ball valve closed when not in use.

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).

Nitrogen Inerting Manifold
Specify: Model TNIM Nitrogen Inerting Manifold, P/N TNIM01