



Dynisco BP420 Burst Plugs

Reliable, Secure Pressure-Relief System

Installation Instructions

WARNING:

- a. Read the complete instructions before attempting to install the rupture disk.
- b. It is the user's responsibility for the design of adequate venting and installation of adequate vent piping or directional flow after rupture occurs with the rupture disk as intended. When size is specified, Dynisco LLC assumes that adequate provisions have been made by the purchaser and/or user for proper venting of a system to relieve the specific pressure. Locate the rupture disk where people or property will not be exposed to the system discharge in the event of rupture. Vent toxic or flammable fumes to a safe location to prevent personnel injury or property damage.
- c. It is the user's responsibility to specify the burst pressure rating at the coincident temperature at which the rupture disk is to be used. A rupture disk is a temperature sensitive device. The burst pressure of the rupture disk is directly affected by its exposure to the coincident temperature. Failure to utilize a rupture disk at the specified coincident temperature could cause premature failure or over pressurization of the system.
- d. It is the user's responsibility to ensure that the burst plug snout length and temperature are appropriate so that after a rupture disk failure, molten plastic/media flows continually out of the snout. Failure to do so could result in polymer/media solidifying in the snout and over pressurizing of the system.

It is recommended that the user install and pressurize a sample burst plug to burst in their system to confirm by test that the burst plug functions correctly in their particular application.

- e. Particles may discharge when the rupture disk ruptures. These particles may be part of the rupture disk itself, or other environmental matter in the system. It is the user's responsibility to ensure that the particles are directed to a safe area to prevent personnel injury or property damage.
- f. Rupture disk service life is affected by corrosion, creep and fatigue, and physical damage. These conditions will derate the rupture disk to a lower pressure. The user should be prepared to handle a premature failure of the rupture disk. The media or other environmental conditions should not allow for any build-up or solidification of media on the rupture disk. This may increase the burst rating of the rupture disk.
- g. Dynisco rupture disks, when installed correctly, will provide a very good seal for liquids and most gases or vapors. However, Dynisco cannot guarantee the leakage rate of the disk seal without prior knowledge of the requirements and details of the piping layout. Consult Dynisco for guidance if leakage is critical to the installation.
- h. The customer and/or its installer shall be responsible for the proper installation of rupture disk device into a system. **Recommended torque values do not consider piping stress or alignment.**
- i. Customers and/or its installers shall be responsible for improper installation and physical damage resulting there from, including, but not limited to, damage resulting from leakage, improper torquing, and/or failure to follow installation instructions.
- j. Dynisco standard Terms and Conditions of Sale apply unless otherwise stated in writing by the manufacturer.

Removal, Inspection and Preparation:

- 1 Removing the existing Assembly
 - a Depressurize the equipment before attempting to remove the assembly even if it has burst.
 - b Loosen and remove the burst assembly with the appropriate tool. Take care not to damage the receiving equipment.
- 2 Inspect the Receiving Equipment
 - a Inspect the seat area for any scratches, dents, or nicks. Imperfections on these surfaces can cause leaks. DO NOT USE if any scratches, dents or nicks are detected, (contact Dynisco immediately for instructions).
 - b Inspect and clean the receiving threads, use thread chase or other suitable cleaning device. Threads must be in good condition to receive the rupture disk device. Utilize the Dynisco Machining tool kit for proper holesizing.
- 3 Inspect the Rupture Disk Device
 - a Carefully remove the rupture disk device from its packaging and check the seat area, exposed threads and pre-bulged surface of the disk for any scratches, dents, or nicks. Imperfections on these surfaces can cause leaks. DO NOT USE if any scratches, dents or nicks are detected, contact Dynisco immediately for instructions.
 - b Installation of a damaged assembly may result in premature rupture of the disk.

Installation:

- 1 Insert the new assembly into the pre-tapped opening in the receiving equipment.
- 2 Start threading by hand to ensure the threads are matched and in good condition. DO NOT FORCE THE THREADS. Continue threading the assembly by hand until fully seated.
- 3 Tighten as required to prevent leakage with the appropriate tool (wrench, screwdriver, spanner, etc.) DO NOT OVER TIGHTEN as this can damage sealing surfaces and threads.
- 4 For assemblies having tapered pipe threads; use Teflon tape or other suitable pipe thread sealants as required if compatible with the process medium.