



*From lab to production,
providing a window into the process*



Dynisco BP520 series

Rupture plug with indication.

Dynisco Burst Plug with Burst Indication

Reliable, Secure Pressure-Relief System

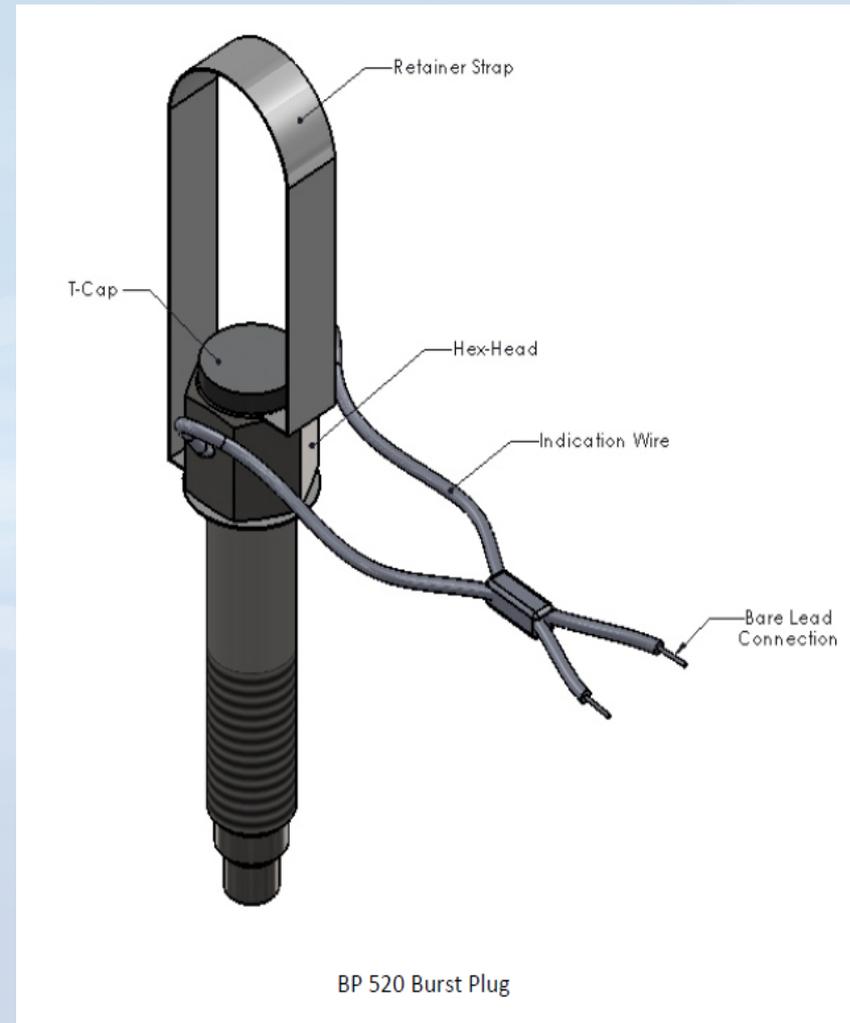


Description

- The Dynisco Model BP520 burst plugs are custom assemblies with pop-top burst indication.
- Burst Plugs (also known as rupture disks) are designed for reliable, emergency relief of excess pressure in a system.
- The Model BP520 is installed on barrel bodies with hex ends, where the hex OD (across flats) is larger than the burst plug body.
- The metal retainer strap is held in place by the hex and the metal 'T' shaped cap is fastened to the other end of the strip.

How does it work?

- A 2mm hole is drilled through the body and cap.
- A burst indicator wire is passed through the hole and when the disk ruptures, the T-cap 'pops open' shearing off the burst indicator wire and indicating a burst to the control system.



Features

- Each welded assembly consists of a threaded tubular body with a rupture disk welded onto the process end
- Welded one piece assembly – no degradation of joint strength at elevated temperatures
- Inconel rupture disk – stable through a wide range of temperatures
- Burst ratings 750 to 15,000 psig (for higher pressures contact Dynisco)
- Burst tolerance $\pm 10\%$
- Typical Standard Deviation is $\pm 1\%$
- 100% leaked tested
- 100% electronic thread verification

Features



Installation

- 1. Insert the new assembly into the pre-taped 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.

Installation

- BP520 plugs are supplied with integral 'pop top' style indication. A 24 AWG indicator wire is preassembled into the unit and supplied with bare leads. The wire is threaded through the hex-head of the burst plug and a 'T' shaped 'pop top' cap.
- When the burst plug ruptures, the T-cap is pushed out by the subsequent flowing media, shearing the burst indicator wire, opening a 'normally closed' circuit and indicating a burst event to a monitoring device. The T-cap is attached to a metal retainer strap designed to hold & secure the T-cap following a burst event.

Warnings

- 1. WARNING: Burst Plugs and indication must be properly installed and safely vented in order to avoid injury, damage and loss of product.
- 2. WARNING: Do not install the BP520 burst plug without the metal retainer strap properly installed under the hex head of the plug.
- 3. Electrical Connection
 - i. Only competent qualified personnel should install and complete the BP520 electrical connections. It is the end users responsibility to ensure a safe installation that is compatible with user electrical requirements. The end user should evaluate the consequences in their system of shorting, opening or grounding of the wire.
- 4. Intrinsically Safe Installations (where required)
 - i. The BP520 with integral pop-top indication is not intrinsically safe by itself, but is intrinsically safe only when employed in a properly designed intrinsically safe system.
 - ii. The BP520 with integral pop-top indication is a passive “simple apparatus” concept allowing it to be used in intrinsically safe systems without the need for certification.
 - iii. If required, refer to ANSI/ISA-RP12.06.01 for the Recommended Practice for Intrinsically Safe Systems.

Configuration with instrumentation

Q: “How can this be used to trigger an alarm with my existing instrumentation?”

A: By running a low voltage with the 24 AWG wire, such as a 0-10V, through the “pop top” directly to an instrument that accepts voltage input.

Explanation: Our indication devices, can be programmed to alarm on sensor input signal break.

Once the burst plug has ruptured, the pop top will break the wire causing the alarm to be triggered.



Questions?