

# Burst Plugs

Reliable, Secure  
Pressure-Relief System



## Features

- Welded one piece assembly - no degradation of joint strength at elevated temperatures
- Inconel rupture disk – stable through a wide range of temperatures
- Burst pressure ranges from 1,000 to 15,000psi
- Accuracy of  $\pm 10\%$  of rated burst pressure at 300° – 750°F
- Leak rate exceeds  $1 \times 10^{-6}$  standard cc/sec

## Description

The Model BP420 burst plugs are designed specifically for use in plastic extrusion systems. Burst Plugs (also known as rupture disks) are designed for reliable, emergency relief of excess pressure in a system. The Model BP420 will instantaneously rupture at a specific, predetermined pressure and temperature. Each one piece assembly consists of a 304 stainless steel body with a welded Inconel rupture disk. The disk is flush with the tip of the burst plug with no cavity for product build up. A burst plug may be specified for primary relief in applications where pressure build-up can occur so rapidly that the response time of a relief valve is inadequate, such as in a polymerization reaction vessel.

All burst plugs are tested at rated burst pressure and temperature. In addition, markings on the burst plugs are laser engraved and more visible, and each burst plug is labeled and shipped in a protective package.



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## Specifications

### MECHANICAL & PACKAGING CHARACTERISTICS

#### Material of Construction:

**Body:** 304 stainless steel  
**Rupture Disk:** Inconel

**Accuracy:** Accuracy of  $\pm 10\%$  of rated burst pressure at 300° – 750°F

### APPROVALS AND CERTIFICATIONS

**ISO:** ISO 4126-2:2003(E)

**CE:**

**PED 97/23/EC, modules B&D**

**Burst Certification:** Each unit is test burst certified

**Mounting Torque:** Not to exceed 300 in/lbs.

## Ordering Guide

BP420-XXX-XX-XX-XXXX

#### Process Connection

1/2 = 1/2-20 UNF  
 M14 = M14 x 1.5  
 M18 = M18 x 1.5  
 5/8 = 5/8-11 NC  
 3/4S = 3/4-16 UNF Short Thread  
 3/4F = 3/4-16 UNF Full Thread

#### Pressure Range

|                 |                   |
|-----------------|-------------------|
| 1M = 1,000psi   | 5.5M = 5,500psi   |
| 1.5M = 1,500psi | 6M = 6,000psi     |
| 2M = 2,000psi   | 6.5M = 6,500psi   |
| 2.5M = 2,500psi | 7.5M = 7,500psi   |
| 3M = 3,000psi   | 8.5M = 8,500psi   |
| 3.5M = 3,500psi | 9.5M = 9,500psi   |
| 4M = 4,000psi   | 10M = 10,000psi   |
| 4.5M = 4,500psi | 12.5M = 12,500psi |
| 5M = 5,000psi   | 15M = 15,000psi   |

#### Polymer Discharge Options

blank = Slotted or Hex Nut ( Standard)  
 1/4NPT = 1/4 NPT Fitting  
 1/2NPT = 1/2 NPT Fitting

#### Plug Length

1.81 = 1.81" (4.6cm). Slotted  
 2.5 = 2.5" (6.4cm). Hex  
 3 = 3" (7.6cm). Hex  
 4 = 4" (10.2cm). Hex  
 6 = 6" (15cm). Hex  
 7 = 7" (7.8cm). Hex  
 9 = 9" (23.0cm). Hex  
 12 = 12" (32.0cm). Hex

Shaded sections refer to standard (short lead time) configurations. Contact the factory for other configurations that may be available..

