

Pressure Burst Disk

Burst Disks

MDC Burst Disks are designed as a safety device to protect vacuum systems against over-pressurization during back-fill or from an accidental increase in pressure due to a system malfunction. BDA-series ASME UD certified burst disks feature all-metal stainless steel construction and are designed for use in UHV applications.

Application

Most vacuum vessels are designed and constructed with internal vacuum joints and welds that are rated for an external load of one atmosphere. They are not pressure vessels and as such should not be subjected to positive pressure loads in excess of 1-ATM. For this purpose MDC has developed a new line of BDA disks that are ASME certified to prevent the accidental pressurizing of a vacuum vessel. MDC burst disks are offered with either 1.33 or 2.75 Del-Seal™ (CF style) metal seal flange connections. They can be fitted to any vacuum system where over pressurization is a concern.

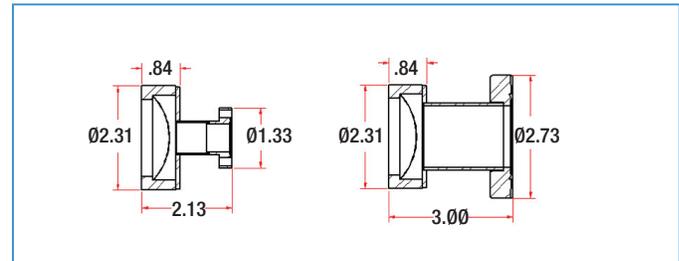
Improved Design

MDC's BDA-series burst disks have been re-engineered to be 10CFR851 compliant. They are constructed with a frustum designed metal membrane which is capable of sustaining a vacuum load. As pressure inside a vacuum vessel reaches 11.5 PSIG the disk membrane activates and fully opens, relieving the pressure in the system. The disk membrane is circular scored preventing fragmenting upon rupture and thus does not pose harm to local personnel or equipment. Once activated, the disk is not reusable and must be replaced to restore the vessel to an operational condition.

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Features

- UHV Compatible all metal construction
- ASME UD certified
- 10CFR851 compliant
- Pressure relief range 9 to 11.5 PSIG
- Leak tight to 2×10^{-10} std. cc/sec of Helium
- 316 Stainless steel body and disk membrane
- Bakeable to 450°C
- Compact design with no moving parts
- Calculated Flow rates
 - 107 SCFM on 1.33 Flg. Assy.
 - 435 SCFM on 2.75 Flg. assy.



For additional details regarding MDC's new Burst Disk product line, please contact-

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DESCRIPTION	REFERENCE	PART NUMBER	PRICE \$
BURST DISK 1.33 DS FLANGE	BDA-133-ASME	420032	627
DESCRIPTION	REFERENCE	PART NUMBER	PRICE \$
BURST DISK 2.75 DS FLANGE	BDA-275-ASME	420033	644