



UHV LP Burst Disk

Low pressure relief system

MDC burst disks are designed as a safety device to protect vacuum systems against overpressurisation during back-fill or from an accidental increase in pressure due to a system malfunction. UHV LP Burst disk 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. For this purpose MDC has developed a new line of UHV LP Burst disk burst disks to prevent the accidental pressurising of a vacuum vessel. MDC burst disks are offered with either DN16CF or DN40CF Del-Seal™ (CF style) metal seal flange connections. They can be fitted to any vacuum system where over pressurisation is a concern.



FEATURES

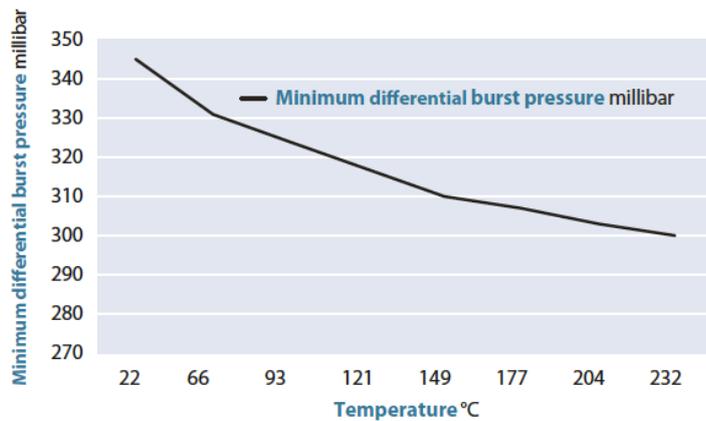
- ISO 4126-2 Certified
- Differential pressure relief range:
 - 345 mbar – 483 mbar @ 25°C
- Leak tight to 1×10^{-9} mbar l/s of Helium
- 316 Stainless steel body and disk membrane
- Bakeable to 350°C
- Compact design with no moving parts
- Calculated flow rates:
 - 79 SCFM on DN16CF flange assembly
 - 336 SCFM on DN40CF flange assembly

IMPROVED DESIGN

Low pressure burst disks have been re-engineered to be ISO 4126-2 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 483 mbar 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.

UHV LP BURST DISK

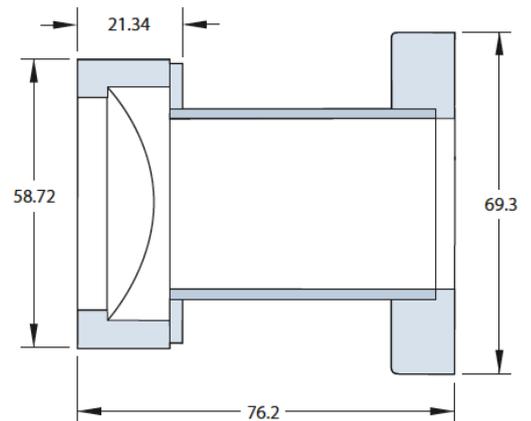
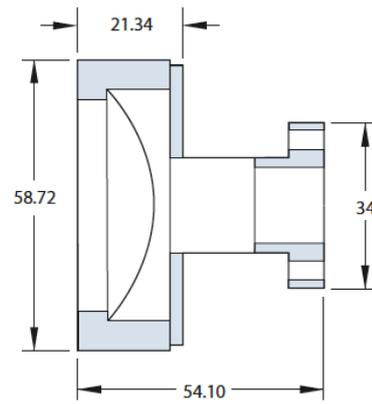
Minimum differential burst pressure data.



ORDERING INFORMATION

Description	Reference	Part Number
Low pressure burst disk DN16CF	LP-BDA-133	420035
Low pressure burst disk DN40CF	LP-BDA-275	420036

For further information on these or any other MDC products, contact your nearest sales office.



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