Burst Discs



Our SAFE-SHEAR™ Burst Discs are designed to set and verify exact rupture pressure in a non-destructive test. This allows systems to safely operate very close to maximum design pressure. Technetics Group currently has SAFE-SHEAR™ Burst Disc assemblies flying on the V-22 Osprey as well as on numerous satellites such as the Hubble Telescope, Mars Global Surveyor, Gravity Probe B, WISE and International Space Station.

Burst discs achieve a leak tightness of $<1.00x10^{-9}$ sccs, considerably better than pressure relief valves alone. They are suited for extreme conditions such as hard vacuum, high pressure, cryogenic and high temperatures. Burst discs are also often designed with a precision pressure relief valve downstream, mated in a weight and space efficient package for dual-redundancy.

FEATURES

- High level of accuracy and dependability ± 1% full scale
- Burst pressure setting range from 1 psid to 10,000 psid [.07 to 689 bar / 7 to 68,950 kpa]
- Operating temperatures from -452°F to > +1000°F [-271°C to $> +540^{\circ}C$
- Burst setting 100% verifiable and adjustable by nondestructive testing
- Achieves leak tightness <1.0x10⁻⁹ sccs, considerably better than pressure relief valves alone
- Allows continuous pressure cycling operation up to 95% of set burst pressure
- Nearly impervious to high shock and vibration levels: Does not cause premature rupture or reduced life

APPLICATIONS

- Transport Aircraft
- Human & Autonomous Space Vehicles
- Sensitive Rail Cargo
- Cryogenic

HIGH-PRECISION AEROSPACE



CRYOGENIC



