

- Aerospace
- Defense
- Propulsion



OE
AEROSPACE

Advanced Pressure Safety Solutions



A **Halma** company

High-integrity, high-performance Your partner for pressure relief and activation

In the extreme environments of aerospace and defense technology, you need confidence that the mission-critical hardware you design, build, and deliver will not fail. To protect life and vital equipment, we specialize in advanced pressure relief and activation solutions engineered for safety, precision, and performance.

For decades, primes, tier 1 suppliers, and OEMs have trusted our pressure management solutions to deliver the precision, proven reliability, and high performance required for equipment operating in the harshest conditions.

Custom Engineering and Testing Services



When you need to deliver mission-critical hardware for harsh environments with confidence, you can trust our in-house engineering services. We'll act as an extension of your engineering team, collaborating to evaluate pressure management requirements, define specifications, and develop the right solution.

Overcome design constraints.
Enable easy forward integration.

With decades of industry experience, our six-step engineering and testing process offers proven compliance and reliability in real-world conditions.



* Testing capability includes shock, vibration, and cycle testing as well as performance at high temperatures and/or cryogenic temperatures, down to liquid helium.



Proven Performance in Extreme Conditions



Li-ion Battery Systems

The specialist battery systems used in aerospace and defense applications must be compact, high-capacity, robust, and 100% reliable. We are experienced in designing and manufacturing custom pressure relief devices that can withstand extreme temperatures, pressure, altitude, shock, and vibration, with no compromise on performance.



Fuel and Propulsion Systems

Safely isolate and protect fuel, pressurant gases and equipment to enable clean, repeatable engine start sequences. Our robust, corrosion-resistant rupture discs are leak-tight to guarantee absolute containment until activation. They activate in milliseconds, and are reliable under vibration, acoustic loads, and thermal cycling.



Cryogenics Systems

We understand the specific challenges associated with cryogenic conditions. We design and build our rupture discs to handle extreme temperatures, extreme pressures and pressure changes, and chemically reactive environments, while delivering reliable, fail-safe performance.



Spacecraft

With a non-mechanical, maintenance-free configuration and high burst accuracy, our rupture discs support precise mission-critical maneuvers in demanding space environments.

From precisely timed launch sequences to orbital adjustments and station keeping, our high-integrity, welded disc assemblies deliver control for years or even decades.



Crew Safety

Our rupture disc assemblies withstand extreme pressure, temperature, vibration, and altitude changes to ensure dependable, fast oxygen delivery when crew safety is critical.

In ejector seats, our rupture discs are used as fail-safe pressure-release devices that activate within milliseconds.

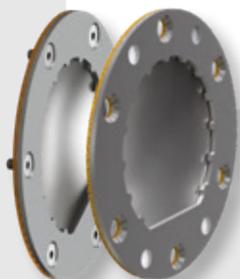
Welded Rupture Disc Assemblies

We take pride in building partnerships with our customers. The most common solution specifications we encounter are listed below, but we welcome custom requirements and unusual applications outside of these.

- **Size ranges:**
3-40mm / 3/16"-1.5"
- **Burst pressure ranges:**
1-1,034 barg / 14.5-15,000 psig
- **Inlet/outlet configurations:**
Threaded
Tube stub
AS5202
VCR-style fitting
Muffle/baffle
Free venting
- **Assembly materials:**
Austenitic Stainless Steel or Nickel as standard. Titanium, platinum, gold, and other exotic materials available on request.

Standards and Accreditations

- ISO 9001
- CE
- ATEX
- JOSCAR registered (UK)
- ITAR registered (USA)



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