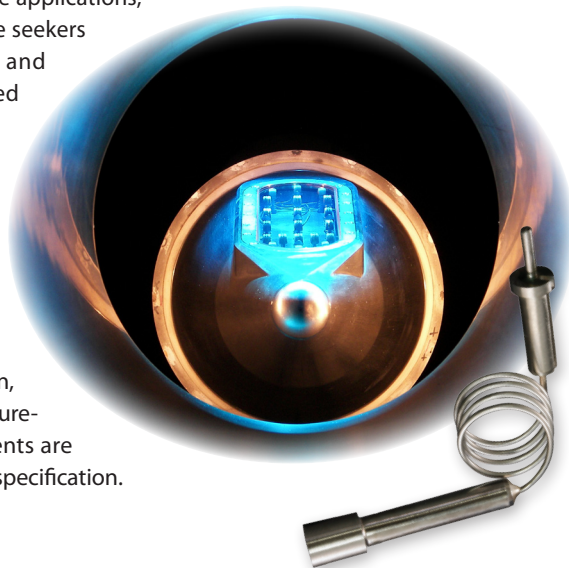




# Pure Air/Nitrogen Cooling Systems

Complete systems and ancillaries for IR guided weapons and weapons ejection applications

**G**lenair high pressure Pure-Air/Nitrogen gas solutions are designed and performance tested for use in a wide variety of Defence and Aerospace applications, including cooling of infrared detectors, missile seekers and all high pressure pneumatic actuation and deployment systems. Products include, Sealed for Life Gas Supply Systems, Re-chargeable Gas Supply Systems, High Pressure Solenoid Valves (miniature & low voltage), Small Bore pipe Assemblies, Relief Valves, Integrated Manifold Assemblies, Charge Valves and High Pressure Vessels. All Systems and Ancillaries are designed for direct incorporation into Joule Thompson (JT) cryogenic systems and all applications which require reliable pressurization, blow down, actuation, and IR Cooling. Glenair Pure-Air and High Pressure Systems and components are designed to exact customer requirements and specification.



- Ultraminiature and lightweight pneumatic components and sub-assemblies
- Pure air and nitrogen (DEF STAN 58-96)
- High-pressure cylinders, solenoid valves, manifolds, and complete sub-assemblies

**Glenair**<sup>®</sup>

Contact:  
Robert Hopson  
Business Development Manager  
Glenair UK Ltd,  
40 Oakham Way,  
Oakham Business Park,  
Mansfield, Notts. NG18 5BY.  
Tel: 44 (0)1242 242440  
Mobile: 44 (0)7889 755651

PURE AIR/NITROGEN

# Lightweight Modular Cooling and Actuation Systems



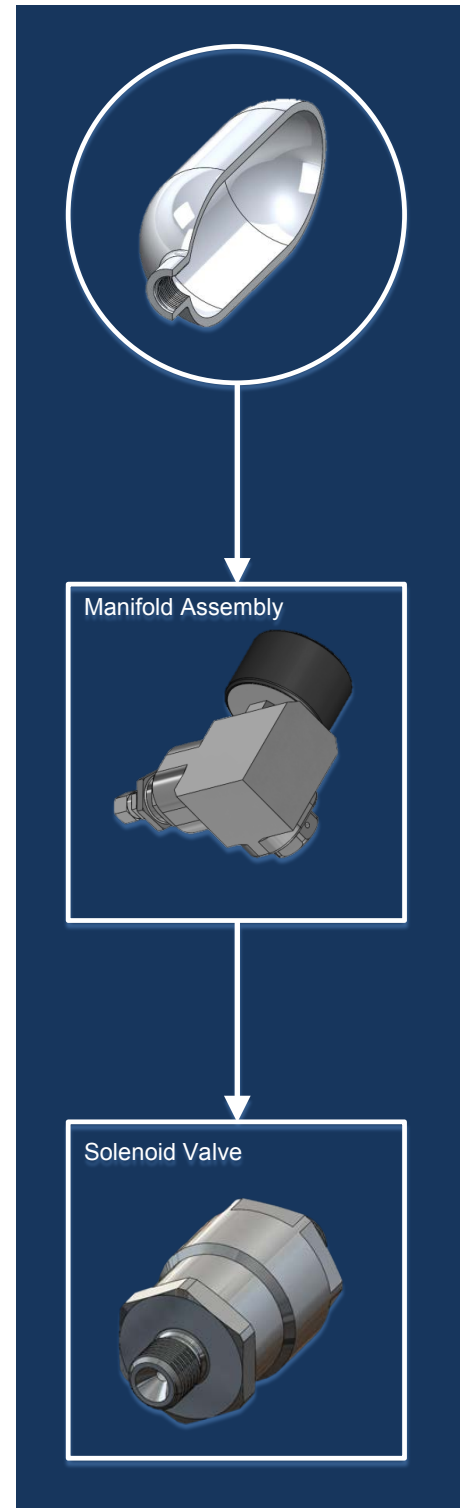
Brazed stainless steel pipework

Glenair pure gas/nitrogen systems and sub-assemblies provide passage of nitrogen and other pure, pressurized gases through precision-machined components such as pressure regulating valves, solenoids, and Joule-Thompson cryogenic cooling systems. Assemblies feature precision stainless steel pipeworks and tubing which are fabricated using a flux-free brazing process and are ultrasonically cleaned and packaged in a sealed, dust-free environment. Electromechanical components are also precision-machined with material properties and dimensional attributes per customer specifications.

- **Manifold Assemblies** – including Charging Valves, Relief Valves or Burst Discs, Pressure Gauges, Control Valves
- **Pipework Sub-Assemblies** connecting cylinders to manifolds or components
- **Pressure Regulating Valves**
- **Solenoid Valves** – manifold or in-line; single or two-stage
- **Manifolds to other sub-assemblies**

Typical performance	
Flow Rate	Typical Flow Rate is 5 liters per minute (lpm) @ 150 PSI.
Operating Temperature	-65°C +175°C for all applicable mechanical requirements.
Physical Shock	No loosening of parts, cracking or other deleterious results hindering further part operation after 300 G's in each of 3 mutually perpendicular planes.
High Impact Shock	All components withstand high impact shock per MIL-S-901.
Vibration	All components withstand high-vibration with no evidence of cracking, breaking or loosening of parts.

Solutions built to exact customer requirements and specifications



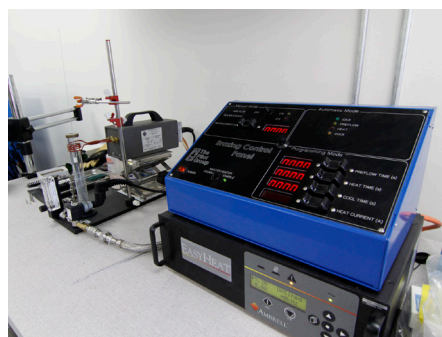
Pressure test rig



Gas tube helium leak test equipment



Pure air compatibility test equipment



Brazing control panel