

Joule-Thomson Type Pure Gas Manifolds, Pipework, and Valve Subassemblies IAW DEF STAN 58-96



Glenair high pressure pure-air/nitrogen gas solutions are designed and performance tested for use in a wide variety of defense 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 and 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-Thomson (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 subassemblies
- Pure air and nitrogen (DEF STAN 58-96)
- High-pressure cylinders, solenoid valves, rotary joints, manifolds, and complete sub-assemblies

Brazed stainless steel pipework

PURE AIR/NITROGEN

Joule-Thomson Lightweight Modular IR Cooling and Actuation Systems



For use in IR guided weapons and ejection systems

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 that 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 p7erpendicular 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.



Pressure test rig



Pure air compatibility test equipment

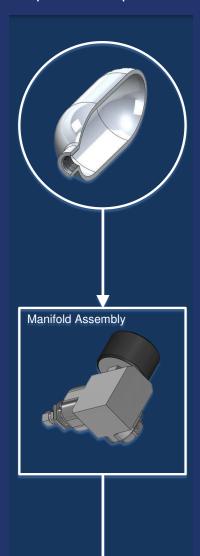


Gas tube helium leak test equipment



Brazing control panel

Solutions built to exact customer requirements and specifications



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