

IR Missile Seeker Cooling System

This autonomous system supplies high-purity, high-pressure dry air for infrared seekers and thermal sensors, enabling rapid cooldown and stable performance in mission-critical environments. Featuring a compact compressor, brushless DC motor, advanced filtration, and closed-loop thermal control, it integrates seamlessly into missile platforms. Maintenance-free and DEF-STAN 58-96 compliant, it ensures long-life reliability in both tactical and long-range operations.

Features

- Continuous supply of high-purity, high-pressure dry air
- Modular and lightweight design for streamlined integration
- Compact, brushless DC compressor unit with low acoustic signature
- Long service life with zero consumables and minimal maintenance

Technical Information

Flow Rate up to 20 NL/min	Ultra-dry gas output <1 ppm H₂O	Pressure capability up to 500 bar	Compliant DEF-STAN 58/96
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Pneumatic Weapon Ejection/Release Systems

This clean, high-pressure pneumatic system offers a residue-free alternative to pyrotechnic release, enabling reliable, maintenance-friendly ejection of munitions and payloads. With onboard gas generation and modular design, it supports UAVs, helicopters, and advanced fighter jets. Featuring intelligent pressure control and high-G resilience, it ensures safe, repeatable deployment of precision weapons while reducing logistics and operational risks.

Features

- Continuous supply of high-purity, high-pressure dry air
- Modular architecture for legacy and next-gen aircraft compatibility
- Easy to maintain, with reduced ground support requirements
- Clean pneumatic actuation with no explosive materials or residue

Technical Information

Flow rate up to 50 NL/min	Pressure capability up to 500 bar	Dry gas output (<15 ppm H ₂ O) to protect munitions	Compliant DEF-STAN 58/96
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Oil-Free High Pressure Booster Compressor

Compact and oil-free, this booster handles oxygen, nitrogen, argon and dry air compression up to 230 bar (optionally 860 bar) with multi-stage stainless steel pistons and integrated safety controls. All wetted parts are 316L stainless steel, offering clean, long-life operation in filling stations, oxygen generation units, and high-integrity backup systems.

Features

- Compact, modular design suitable for oxygen generation, filling, or backup systems
- Multi-stage stainless steel piston with long-cycle durability
- Temperature and pressure-regulated automatic operation
- Integrated safety relief valves on every compression stages

Technical Information

230 bar (optional up to 860 bar)	Up to 60 nm3/h	All gas-contacting surfaces made from 316L stainless steel	Compliant to DEF STAN 58/96
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Miniature High-Pressure Compressor

This compact compressor supports pressures up to 7,500 PSIG and flow rates from 5 to 60 NL/min. Direct-drive architecture eliminates contamination risk, while aerospace-grade materials ensure durability in vibration- and altitude-sensitive platforms—ideal for seeker cooling, actuation, and pressurization in space-constrained systems.

Features

- Gas compatibility: Dry Air, Argon, Oxygen, Nitrogen
- Oil-less architecture – Eliminates contamination risk and simplifies integration
- Built for harsh conditions – Withstands vibration, altitude, and temperature extremes
- Compact & lightweight – Ideal for UAVs, fighter jets, guided munitions, and podded payloads

Technical Information

Maximum pressure 7,500 PSIG	Flow rate 5–60 NL/min	Weight 3.6–27 kg	Compliant to DEF-STAN 58/96 and MIL-STD-810G
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