SENSORS



Aerospace Resolvers for Fail-Safe Position Feedback

Mission-critical sensing solutions, including rugged solid-core designs

Kearfott resolvers deliver reliable, high-precision position feedback for demanding aerospace and defense applications. Designed for compact size, low weight, and dependable operation across diverse environments, these solutions support critical motion-control and stabilization systems.



TANDEM BRUSHLESS





NEW* SOLID CORE

Kearfott offers single-channel, multi-channel, single-speed, and multi-speed resolver configurations, including pancake designs and fully integrated gearhead resolvers with customizable gear ratios delivering a reported **350,000+ hour MTBF—that's 40+ years of continuous operation!**
**Actual service life depends on load, usage, and operating conditions.*

Solid-Core Resolver Built for Extremes

Kearfott's Solid Core Resolver provides precise, reliable rotary position feedback in extreme temperature, shock, vibration, and electromagnetic environments. Built for airborne, land, missile, and naval platforms, it supports positioning, stabilization, motor feedback, and high-speed commutation.

Solid Core Design Features

- Solid-core architecture
- Harsh-environment performance
- No fragile electronics
- Long life, maintenance free

Reliable Sensor Solutions.
Serious Performance.

Proven Reliable

With more than 70 years of sensor expertise, Kearfott delivers resolvers built for consistent performance, long life, and mission-critical reliability.



DEFENSE AND CIVIL APPLICATIONS

- Flight control actuators
- Pilot command and feedback systems
- Missile fin and seeker positioning
- Fuel control systems
- Radar and antenna positioning
- Turret and weapon stabilization
- UAV, UGV, and naval control systems
- High-speed motor commutation

Kearfott

RESOLVER SPECIFICATIONS

Characteristics	High-Performance Resolver Family
Form Factor	Compact, lightweight, cost effective
Resolution	2Vrms to 28rms, 400Hz to 10,000Hz
Accuracy	Transmitter (RX), Receiver (RC), or Differential (RD)
Operating Temperature	-55 to 230°C (-67 to 450°F) Extended Ranges available upon request
Electrical Interface	Transmitter (RX), Receiver (RC), or Differential (RD)
Available Features	Redundancy Flexible mounting interface Environmentally & hermetically sealed Integrated gearing

Performance varies by configuration—detailed specifications available on request

FEATURED PRODUCT



SOLID CORE RESOLVER

Solid-core design provides exceptional mechanical strength and resistance to shock and vibration for high-speed, high-acceleration applications. Supports reliable operation across extreme temperature ranges and demanding environmental conditions.

Typical Solid Core Resolver Characteristics	
Form Factor	Compact, rugged, and customizable
Resolution	Infinite (analog output)
Accuracy	Up to ±30 arc-minutes (model dependent)
Operating Temperature	–55 °C to +175 °C
Electrical Interface	Standard resolver signals (Sin/Cos)
Available Features	1, 2, 3, or 4 channels EMI-shielded cabling Customizable attach points Environmentally & hermetically sealed Non-Jamming hard stops Custom shaft, mounting & winding options

Designed for Defense & Civil Integration

- Suitable for safety-critical and redundant architectures
- Passive sensing technology eliminates fragile electronics
- Extended service life with minimal maintenance
- Supports MIL-STD environmental requirements
- RTCA DO-160 compliant, Nadcap and AS9100 certified
- Resistant to shock, vibration, humidity, and contaminants

ON COURSE. ON TARGET. ON POINT.

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