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**Calibration Specification for Gyroscopes with Dynamic
Features
(English Translation)**

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Introduction

Gyroscope is widely used in various fields of national economy, its static characteristics are associated with calibration specifications or test method, Dynamic characteristics of the

country still do not have the technical regulations, based on this consideration, combined with the dynamic characteristics of the gyroscope calibration real Actual situation, referring GJB2425A-2004 "Test Method for Fiber Optic Gyroscope" Writing this specification.

Gyroscope dynamic characteristics calibration specification

1 Scope

This specification defines the gyroscope dynamic characteristics calibration items and calibration methods for SDOF rate gyro Instrument, multi-DOF rate gyroscope for implementation.

2. References

This specification refers to the following documents.

GB 321-2005 priority number and priority number system GJB150.15A-2009 military equipment environmental laboratory test methods - Part 15. Acceleration Test GJB150.16A-2009 military Laboratory environmental test methods - Part 16. vibration test Environmental test methods - Part 18 GJB150.18A-2009 military equipment laboratory. impact test GJB585A-1998 inertial technology terms GJB2425A-2004 fiber optic gyro test methods for dated references, only the dated edition applies to this specification; undated reference documents Member, the latest edition (including any amendments) applies to this specification.

3 Terms

GJB585A-1998, GJB2425A-2004 and established the following terms, definitions and symbols apply to this specification.

3.1 Sensitivity amplitudesensitivity Inspired by the sinusoidal angular acceleration signal, the gyro output signal sinusoidal component peak angular acceleration signal input Peak ratio.

3.2 magnitude nonlinearity amplitudenonlinearity Characterization of the gyro output signal sinusoidal component peak with the peak sinusoidal input signal change with the changes of nonlinear presented characteristic.

3.3 phase delay Inspired by the sinusoidal angular acceleration signal, the gyro output signal of sinusoidal components of the input signal is sinusoidal angular acceleration Phase component.

3.4 Bias variation vibration biaschangebetweenvibrationbeforeandafter Vibrating gyroscope bias mean before and after the vibration gyroscope bias mean absolute difference, °/h, °/s.

3.5 vibration variation biaschangesinvibration During vibration gyroscope bias and gyroscope bias mean absolute difference in vibration before and after the vibration average, °/h, °/s.

3.6 Partial Zero impact the amount of change biaschangebetweenshockbeforeandafter
Before the impact of gyroscope bias and mean after impact gyroscope bias mean absolute
difference, °/h, °/s.