

ER-DTG-E5 Flexible gyroscope

Introduction

Strapdown Flexible gyroscope with long lifetime, wide measurement range and high reliability, has been widely used in strapdown inertial measurement unit and high dynamic transporter attitude system.

Features

High speed;

Light weight;

Small volume;

High reliability;

Specifications

1	Random Drift (1σ)	0.1°/h
2	Drift Stability (1σ)	0.3°/h
3	G-independent	$\leq 15^\circ/\text{h}$
4	G-dependent	$\leq 8^\circ/\text{h}$
5	Frequency Response	$\geq 70\text{Hz}$
6	Power Supply (Three Phase)	500Hz 16V
7	Power Supply (Single Phase)	16KHz 5V
8	Synchronous Speed	10,000
9	Synchronizing Time	$\leq 10\text{S}$
10	Output Gradient	10~14 mv/°
11	Master torquer	$7\pm 1 \Omega$
12	Vice control torquer	$2\pm 0.5 \Omega$
13	Scale Factor-Master torquer	$\geq 600^\circ/\text{h}/\text{mA}$
14	Scale Factor-Vice control torquer	$\geq 10^\circ/\text{h}/\text{mA}$

15	Max. Tracking Speed	$\geq 200^\circ/\text{s}$
16	Output Non-linearity	$\leq 0.5\%$
17	Lifetime	≥ 3000
18	Operating Temperature	$-40\sim+65^\circ\text{C}$
19	Shock Overload (8ms)	$\geq 60\text{ g}$
20	Dimension	$\Phi 34\times 64\text{mm}$
21	Mounting flanges	$36\times 36\text{mm}$
22	Weight	$\leq 320\text{g}$