

ER-DTG-E2 Oil And Gas DTG Gyroscope

Introduction

Oil and Gas DTG Gyroscope is designed specifically for the drilling fields. After solving many technical difficulties, now its operating temperature up to 100 degree Celsius.

In the drilling field, inertial devices is greater and more adaptable than flying field, because of its tough working conditions, especially the higher environmental temperatures. Therefore, the temperature of adaptation and life requirements are very serious.

Features

Working temperature up to 100 degrees Celsius;

Better applied to the field of drilling;

Strong adaptability.

Specifications

N0.	Item	Parameter
1	Random Drift (1σ)	$\leq 0.3^\circ/\text{h}$
2	Drift Stability (1σ)	$\leq 0.2^\circ/\text{h}$
3	G-independent	$\leq 12^\circ/\text{h}$
4	G-dependent	$\leq 3^\circ/\text{h}$
5	Frequency Response	$\geq 60\text{Hz}$
6	Power Supply (Three Phase)	400Hz 12V
7	Power Supply (Single Phase)	16KHz 7V
8	Synchronous Speed	12,000
9	Power to Start Up	4 W

10	Operating Current	$\leq 0.18 \text{ A}$
11	Synchronizing Time	$\leq 10 \text{ S}$
12	Output Gradient	14 mv/°
13	Master torquer	7Ω
14	Vice control torquer	2Ω
15	Master torquer	$\geq 500^\circ/\text{h/mA}$
16	Vice control torquer	$\geq 10^\circ/\text{h/mA}$
17	Max. Tracking Speed	$\geq 200 \text{ }^\circ/\text{s}$
18	Output Non-linearity	$\leq 0.1\%$
19	Lifetime	≥ 5000
20	Operating Temperature	$-10\sim+100^\circ\text{C}$
21	Shock Overload (8ms)	$\geq 50 \text{ g}$
22	Dimension	$\phi 29 \times 52 \text{ mm}$
23	Mounting flanges	$30 \times 30 \text{ mm}$
24	Weight	$\leq 130 \text{ g}$