ER-QA-03D Anti-shock and High-Temp Quartz Accelerometer for Oil and Gas

Introduction

ER-QA-03D Anti-shock and High-Temp Quartz Accelerometer For Oil and Gas with high-temp, strong anti-shock and high reliability performance, not only it can used in aviation and aerospace inertial tests but also can be used in both static and dynamic acceleration measurements. In addition, the accelerometer uses a temperature sensor, which the operator can use to compensate bias and scale factor parameters to reduce the influence of temperature factors.

The products are widely used for aerospace inertial navigation, guidance and control, industrial measurement and for measurement-while-drilling (MWD) in oil and gas fields.

Applications

MWD tools

LWD tools

Inertial navigation

Oil well logging

Gyro inclinometer

Guidance and control

Specification

No. Parameters	ER-QA-03D1	ER-QA-03D2	ER-QA-03D3	

1	Range	±30g	±30g	±30g
2	Bias	<10mg	<40mg	<40mg
3	Bias repeatability	<50µg	<250µg	<250µg
4	Bias temp coefficient	<50µg/℃	<150µg/℃	<150µg/℃
5	Scale factor	1.1~1.4 mA/g	1.1~1.4 mA/g	1.1~1.4 mA/g
6	Scale factor repeatability	<80 ppm	<250 ppm	<250 ppm
7	Scale factor temp coefficient	<100ppm/℃	<200ppm /℃	<200ppm /℃
8	Resolution	<10µg	<10µg	<10µg
9	Bandwidth	>300 Hz	>300 Hz	>300 Hz
10	Vibration	25g @30-500Hz	25g @30-500Hz	25g @30-500Hz
11	Shock	500g 0.5ms	1000g 0.5ms	1000 g 0.5ms
12	Voltage	±12~±15V	±12~±15V	±12~±15V
13	Power Consumption	<480 mW	<480 mW	<480 mW
14	Current	<20 mA	<20 mA	<20 mA
15	Operating temperature	-55~96℃	-55~125℃	-55~180℃
16	Diameter	Ф25mm	Ф25mm	Ф25mm
17	Height	<21.5mm	<21.5mm	<21.5mm
18	Installation error	<1500µrad	<1500µrad	<1500µrad
19	Weight	<65g	<65g	<65g

Install dimension

