BS-AQ34 Accelerometer

BS-AQ34 series quartz flexible accelerometer is a small, high temperature resistant seismic type accelerometer. The product has excellent repeatability, starting performance, high temperature seismic resistance and high reliability characteristics, which can be used for both static testing and dynamic testing, and is also a standard vibration sensor.

The product adopts unique miniaturization, high temperature resistant seismic design, advanced packaging process and special circuit, the output current of the product is proportional to the input acceleration, the user can select the appropriate sampling resistance through calculation, to achieve high precision output. And according to the user requirements of the built-in temperature sensor, can be used to compensate for the partial value and scale factor, to reduce the impact of environmental temperature. Since the launch of this product was launched in 2012, the number of deliveries has reached thousands. After years of application, it has become a mature product. The product has been widely used in the drilling measurement of oil drilling.

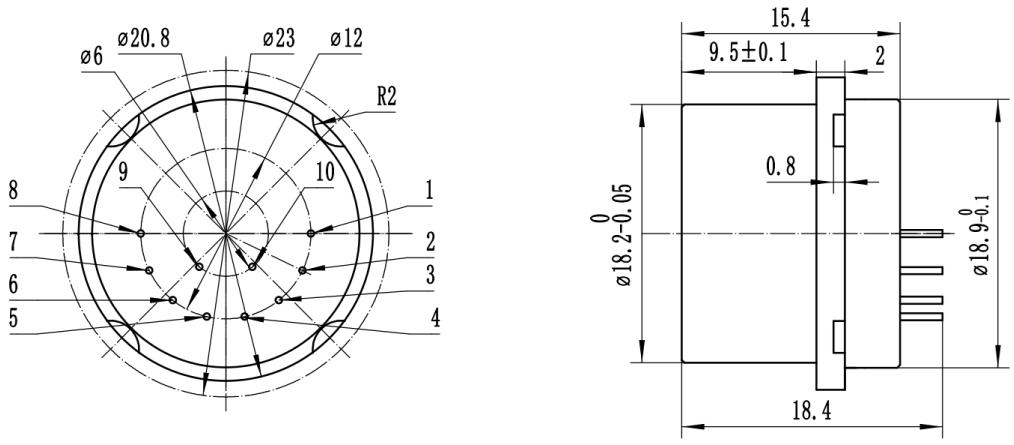
Features:

1. Excellent turn-on repeatability performance
2. Environmentally rugged
3. Analog output
4. Field adjustable range
5. Smaller outline size(≤25gram)
6. Widely operating Temperature Range（-55~180ºC）

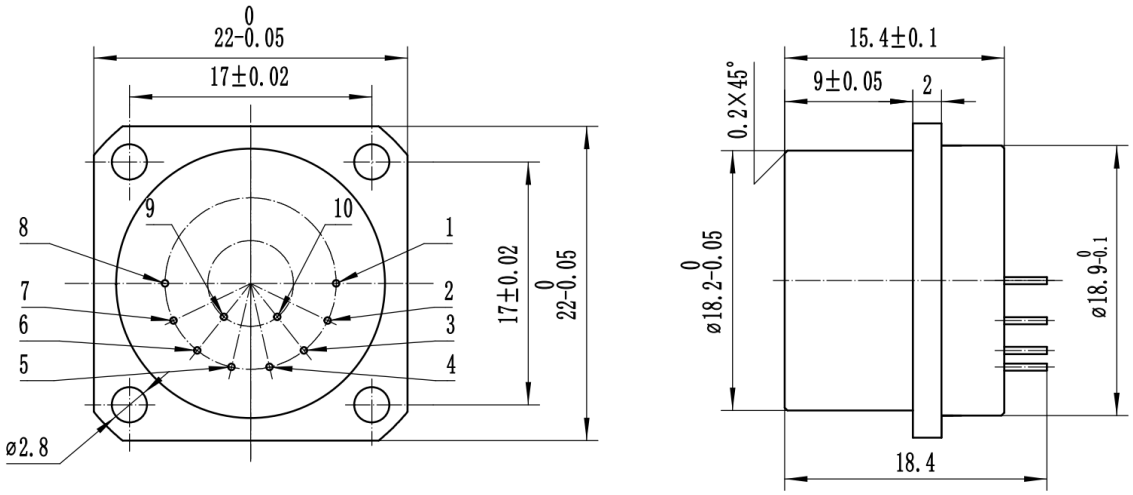
Full product codes:

BS-AQ34A-30-A
BS-AQ34A-30-B
BS-AQ34B-30-A
BS-AQ34B-30-B

BS-AQ34x-30-y
BS - Blitz Sensor
AQ34 - Series
x - type according to accuracy (A, B or C) (see page No.3)
30 - measuring range
y - housing type (see page No. 2)



Housing type A outside drawing (round)



Housing type B outside drawing (square)

Performance characteristics

S/No	Parameters	BS-AQ34A	BS-AQ34B
1	Range	±30g	±30g
2	Threshold /Resolution	30μg	30μg
3	Bias k0/k1	≤(±20 mg)	≤(±20 mg)
4	Scale factor kl	1.9～2.1mA/g	1.9～2.1mA/g
5	Class II nonlinearity coefficient k2/k1	≤±20μg /g2	≤±50μg /g2
6	Bias drift Sigma k0(1σ，one month)	≤150 μg	≤220 μg
7	Stability of scale factor Sigma kl/kl (1σ，one month)	≤150ppm	≤220 ppm
8	Class II nonlinearity Coefficient stability k2/k1(1σ，one month)	≤±40 μg /g2	≤±50 μg /g2
9	Bias thermal coefficient	≤±80 μg /℃	≤±150 μg /℃
10	Scale factor thermal coefficient	≤±100 ppm /℃	≤±200 ppm /℃
11	Noise (sample resistance 840Ω)	≤8mv	≤8.4mv
12	Natural Frequency	350~800 Hz	350~800 Hz
13	Bandwidth	800~2500 Hz	800~2500 Hz
14	Vibration	25g(20-2000Hz)	25g(20-2000Hz)
15	Shock	1000g,0.5ms,1/2sin	1000g,0.5ms,1/2sin
16	Temperature range(Operating)	-40℃+150℃	-40+180℃
17	Temperature range(saved)	-60-+180℃	-60-+200℃
18	Power	±12~±15V	±12~±15V
19	Consume current	±20mA	±20mA
20	Size	Φ18.2X16mm	Φ18.2X16mm
21	Weight	25g	25g