

# BS-AQ32 Accelerometer



BS-AQ32 series quartz flexible accelerometer is a high temperature and anti-vibration accelerometer, the product has excellent repeatability, starting performance, high temperature and high reliability characteristics, it can be used for static testing and dynamic testing, it is also a standard vibration sensor.

Products adopt unique high temperature design, packaging process and special circuit, product output current is proportional to the measured acceleration, the user can calculate the appropriate sampling resistance, achieve high precision output, and according to the user demand built-in temperature sensor, used for the partial value and scale factor compensation, reduce the influence of environmental temperature. We can make the accelerometer bias value and scale factor more stable; it is launch since 2010, this product has delivered thousands of products. After years of application, it has become a mature product, especially a large number of applications in the drilling measurement of oil drilling

Application fields: inclination test of bridge, dam, oil well, coal mine, etc., high-speed railway control, ship stability control, etc.

## Full product codes:

BS-AQ32A-30-A1ES  
BS-AQ32B-30-A  
BS-AQ32B-30-B1  
BS-AQ32B-30-B2  
BS-AQ32B-30-C  
BS-AQ32B-30-D  
BS-AQ32C-30-A  
BS-AQ32C-30-B1  
BS-AQ32C-30-B2  
BS-AQ32C-30-C  
BS-AQ32C-30-D

BS-AQ32x-30-y

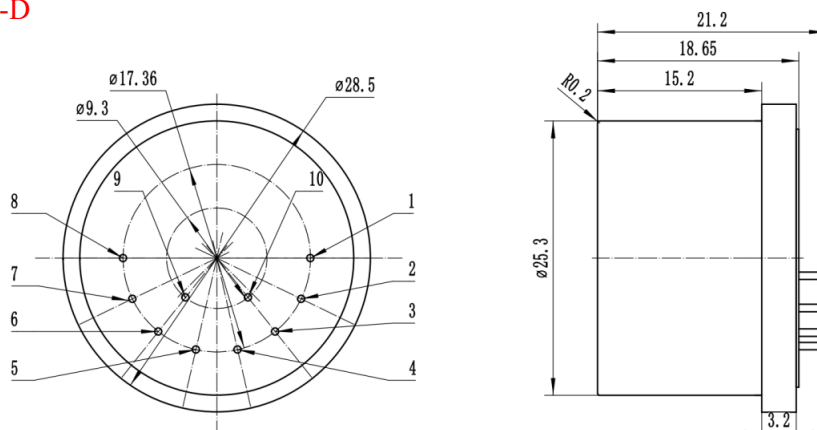
BS - Blitz Sensor

AQ32 - Series

x - type according to accuracy (A, B or C) (see page No.4)

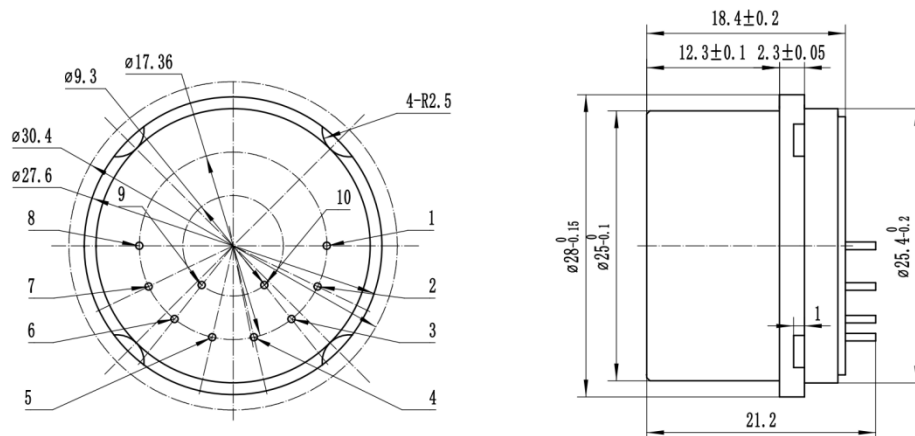
30 - measuring range

y - housing type (see drawings below)

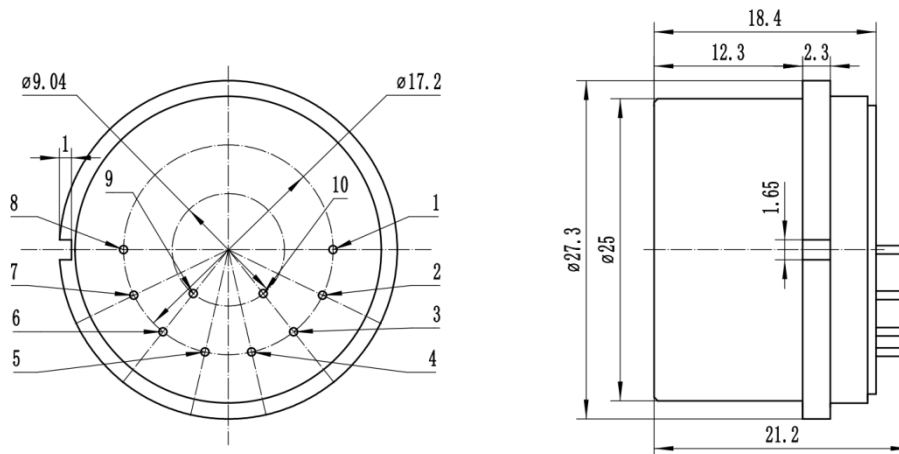


BS-AQ32A-30-A1ES outside drawing

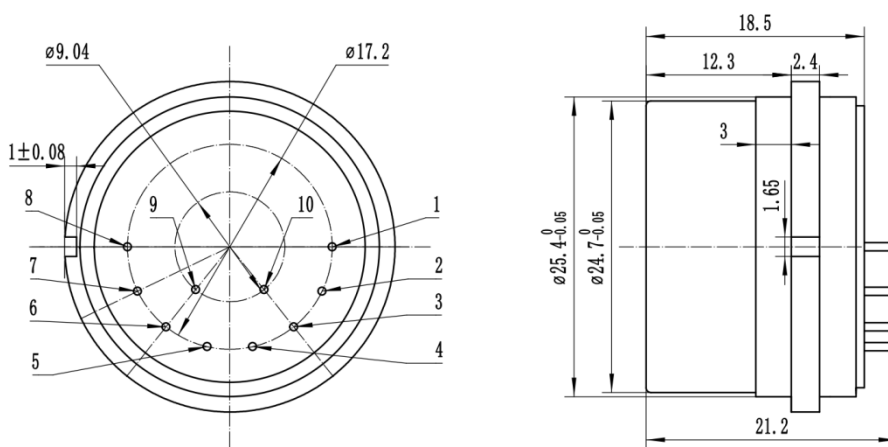
## BS-AQ32B and BS-AQ32C type A outside drawing



## BS-AQ32B and BS-AQ32C type B outside drawing

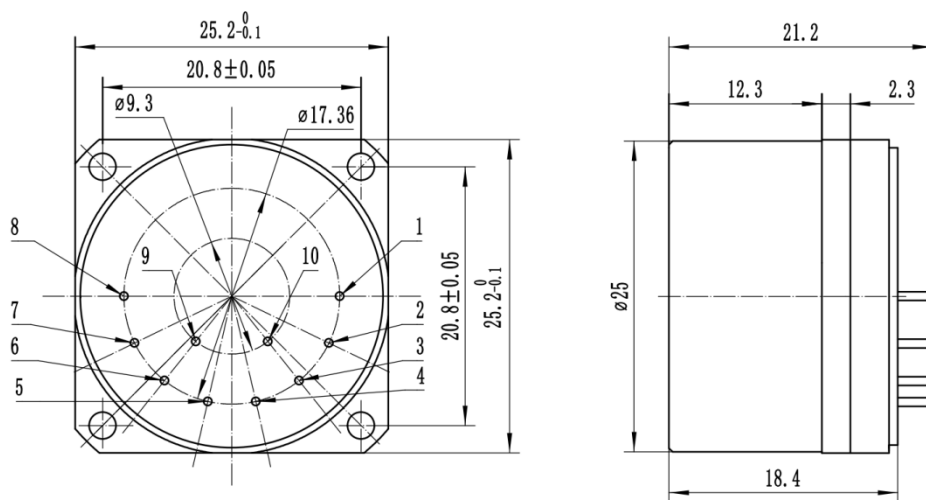


(B type 1)

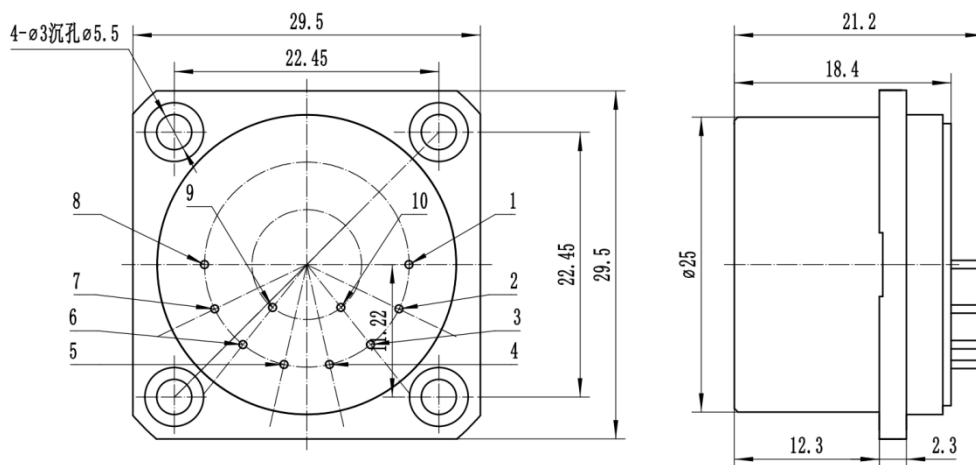


(B type 2)

**BS-AQ32B and BS-AQ32C type C outside drawing**



**BS-AQ32B and BS-AQ32C type D outside drawing**



## Performance characteristics

S/No	Parameters	BS-AQ32A	BS-AQ32B	BS-AQ32C
1	Input range (g)	±30g	±30g	±30g
2	Bias (mg)	<10mg	<15mg	<15mg
3	One-month composite repeatability (µg)	<50µg	<200µg	<200µg
4	Temperature sensitivity (µg/°C)	<50µg/°C	<100µg/°C	<100µg/°C
5	Scale factor (mA/g)	1.1~1.3 mA/g	1.1~1.3 mA/g	1.1~1.3mA/g
6	One-month composite , repeatability (ppm)	<80 ppm	<150 ppm	<150 ppm
7	Temperature sensitivity (ppm)	<100ppm	<200ppm	<200ppm
8	Axis misalignment (µrad)	<1500µrad	<1500µrad	<1500µrad
9	Vibration rectification (µg/g 2rms)	<30µg/g 2rms (50-500Hz)	<100µg/g 2rms (50-500Hz)	<100µg/g 2rms (50-500Hz)
10	Intrinsic noise (µg-rms)	<3000µg-rms (0-10000Hz)	<3000µg-rms (0-10000Hz)	<3000µg-rms (0-10000Hz)
11	Operating temperature range (°C)	-55~96°C	-55~155°C	-55~180°C
12	Shock (g)	500 g 0.5ms	1000 g 0.5ms	1000 g 0.5ms
13	Vibration peak sine (g)	25 g @30-500Hz	25 g @30-500Hz	25 g @30-500Hz
14	Resolution /threshold (µg)	<10µg	<10µg	<10µg
15	Bandwidth (Hz)	>300 Hz	>300 Hz	>300 Hz
16	Quiescent current per supply (mA)	<20 mA	<20 mA	<20 mA
17	Quiescent power (mW)@ ±15VDC	<480 mW	<480 mW	<480 mW
18	Input voltage	±13 to ±18V	±13 to ±18V	±13 to ±18V
19	Weight (grams)	<55g	<55g	<55g
20	Diameter below mounting surface	Φ25mm	Φ25mm	Φ25mm
21	Height-bottom to mounting surface (inches)	<21.5mm	<21.5mm	<21.5mm
22	Case material	300 series stainless steel	300 series stainless steel	300 series stainless steel