

General description

CETC's CX-2 navigation-grade accelerometers are designed both for commercial and military use in strap-down inertial navigation systems for aircraft, marine, land and other applications. Excellent performance of these accelerometers is achieved owing to proven quartz flexure technology. Implementation of the latest advances in technology and economy of scale enable us to set lower price compared to other analogue accelerometers. The CX-2 accelerometers can be supplied with integrated Bias and Scale Factor temperature models upon customer request.

Features

- Excellent turn-on repeatability performance
- Environmentally rugged
- Analog current-output
- Range up to 50 g
- Fastener precision mounting flange



Applications

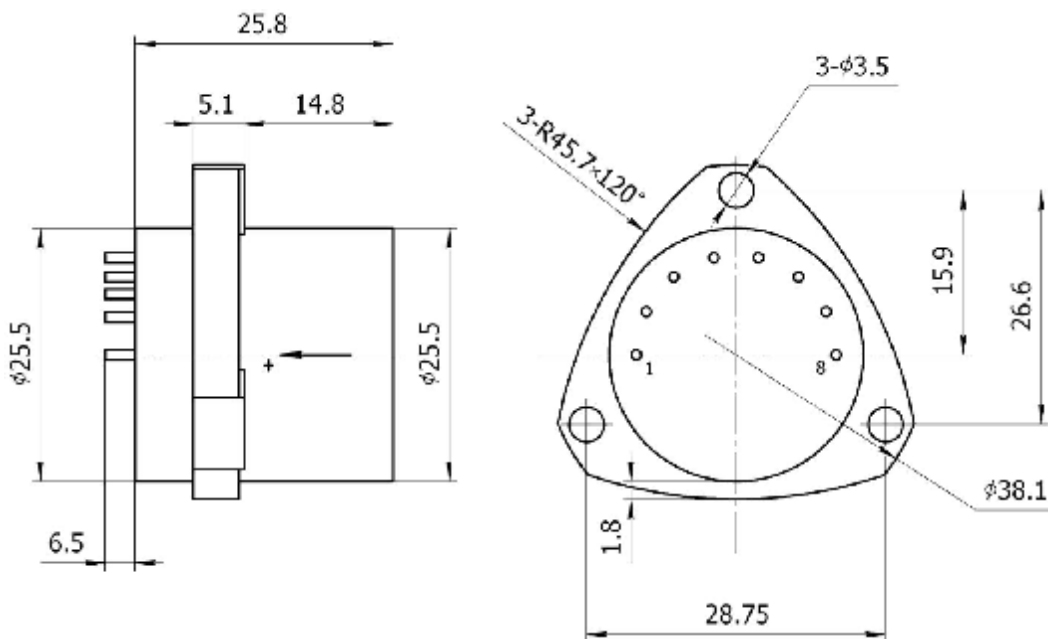
- Inertial Navigation Systems for helicopters, manned and unmanned (UAV) aircrafts
- Navigation /orientation /gyrocompassing systems for naval vessels, ships, submarines
- Guidance systems for strategic or tactical missiles
- Orientation systems for oil drilling industry

Technical parameters

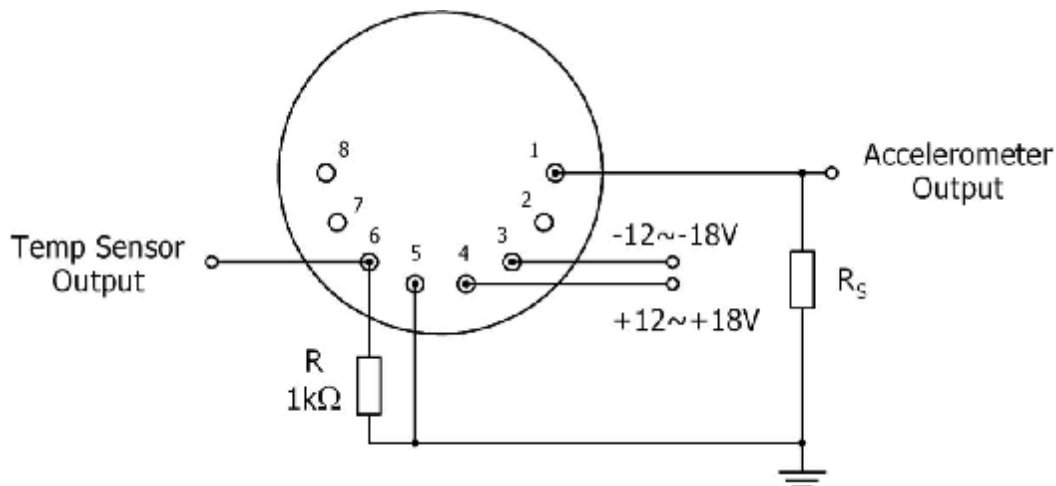
Parameters	Unit	Value
1 Performance		
Input Range	g	±50
Bias	mg	<3
Stability	µg	<30
One-month Repeatability	µg	<50
Temperature Sensitivity	µg/°C	<50
Scale Factor	mA/g	1.0 ±0.2
One-month Repeatability	ppm	<50
Temperature Sensitivity	ppm/°C	<50
Axis Misalignment	µrad	<2,000
One-month repeatability	µrad	<100
Non-linearity	µg/g ²	<50
Resolution	µg	5
Bandwidth	Hz	0 ~200
2 Environment		
Operating Temperature	°C	-50 ~+85
Vibration	g, Hz	8 g @ 20 ~2000 Hz
Shock	g	70

3 Electrical		
Current per Supply	mA	<16
Power @ ±15 VDC	mW	<480
Input Voltage	VDC	±12 .. ±18
Temperature sensor		Yes
4 Physics		
Size	mm	Ø 38.2 * 25.8
Weight	grams	<80
Case Material		Stainless Steel

Accelerometer dimensions drawing (mm)



Connector PIN description



PIN	Signal
1	Accelerometer Output
2	Only for manufacturer's testing purposes and non-connecting for user
3	Negative Power: $-12\sim-18V$;
4	Positive Power: $+12\sim+18V$;
5	Ground;
6	Temperature Sensor Output;
7	Differential Capacitance (Only for manufacturer's testing purposes and non-connecting for user)
8	Differential Capacitance (Only for manufacturer's testing purposes and non-connecting for user)