principle characteristics

ZD400 piezoelectric integrated vibration transmitter has built-in piezoelectric elements to sense vibration acceleration, and converts the RMS value of acceleration or integrated velocity RMS value into 4-20mA current output of corresponding range through high precision compact circuit, which is convenient for remote transmission display and control. Suitable for connecting to DCS, PLC and data acquisition system.

- Two-wire system loop, transmitter use and maintenance more convenient, more economical
- Fault-tolerant technology, loop two - line polarity arbitrary connection
- Low power consumption, high stability measurement line, to ensure the linear vibration value of the high-precision current output
- Piezoelectric core, integrated structure, long life, durable, suitable for all kinds of harsh environments

product application

Used for on-line vibration monitoring of steam turbines, ventilators, blowers, fans, electric motors, pumps, centrifuges, separators, generators, turbines and similar oscillating mechanical equipment.

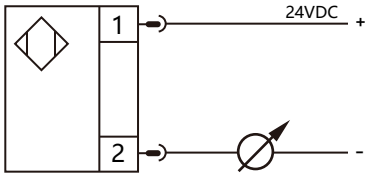
Technical parameters

- ◇ Electrical source: 24V±10%Vdc
- ◇ Power supply, maximum power consumption 0.5W;
- ◇ Measuring range: 0 ~ 10g or 0 ~ 100mm/s (optional range)
- ◇ Frequency range: 10 ~ 1000Hz;
- ◇ Sensitive direction: axial direction, arbitrary direction/Angle installation;
- ◇ Transverse sensitivity: ≤3%;
- ◇ Electrical isolation: 500VRMS, circuit and shell isolation;
- ◇ Current output: standard two-wire system 4 ~ 20mA output;
  (Proportional to the effective value of measured vibration value)
- ◇ Accuracy: ±1%; (load: biggest 500 Ω)
- ◇ Impact limit: 1000g;
- ◇ Quality: 0.2kg;
- ◇ External dimensions: 24*56mm
- ◇ Installation: Screw M10*1.5 or M8*1.25
- ◇ Protection level: IP68
- ◇ Environment: -30 ~ 100℃;
- ◇ Relative humidity: no more than 95%, no condensation.

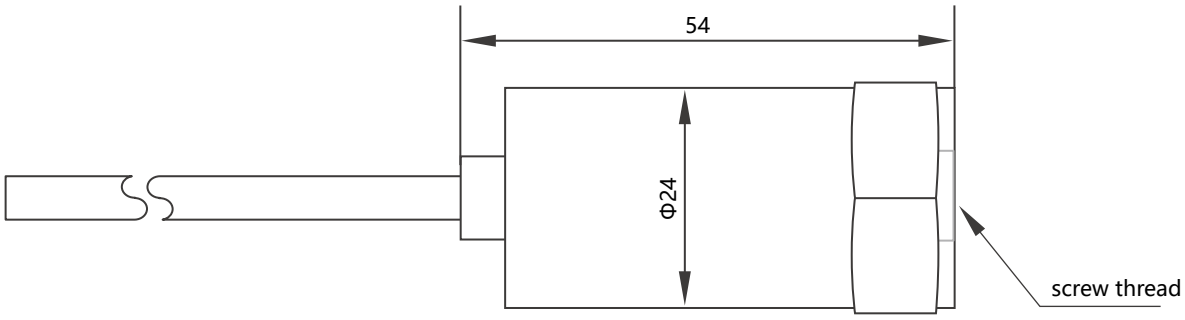
Use method/wiring diagram

Before using the vibration transmitter, check whether the wiring is finished, and then the transmitter is fixed at the measured point;

- Confirm that the working power of the vibration transmitter should be 24V±10%VDC;
- The vibration transmitter is powered on, and the output current should be 4.00mA without vibration;
- Vibration of the machine under test, vibration transmitter output should be vibration - linear 4-20mA current output;



Size chart（mm）



Selection table

ZD400-	A010	B01	C00	detailed
ZD400				ZD400 Piezoelectric vibration sensor
	A010			Scale range: 5g
	A020			Scale range: 10g
	A100			Scale range: 10mm/s
	A200			Scale range: 20mm/s
		01		length of the wire: 1m
		02		length of the wire: 2m
		03		length of the wire: 3m
		05		length of the wire: 5m
			C00	Set screw: M10*1.5
			C01	Set screw: M8*1.25
			C02	Magnetic suction seat
			C04	other