

VT9268E LPT HART Standard Side Exit Vibration Transmitter

1. Overview

The VT9268E is a LPT HART Standard Side Exit Vibration Transmitter. Based on the piezoelectric measurement principle, the transmitter uses the digital integrated circuit and microprocessor technique for sensing the rotating machinery vibration velocity. It combines the vibration velocity sensor and signal conditioner in single stainless steel housing and offers you the most ideal solution for sensing rotating machinery vibration velocity. The transmitter can output a 4-20mA signal proportional to vibration velocity and transmit the signal to PLC/DCS, monitor, or other indicating instrument either directly or by the HART protocol. It is widely applied in rotating machinery such as fan, blower, centrifuge, compressor, pump and motor, etc.

VT9268E is a self-contained vibration velocity transmitter without any moving part. The full scale range is marked on the label and can be modified by a HART communicator. The VT9268E transmitter has notable anti-electromagnetic interference features, so it can be mounted directly on the rotating machinery case or the bearing housing.

2. Product Features

- Optional measurement mode: acceleration, velocity or displacement
- With HART communication protocol
- Connect directly to PLC, DCS or other control system
- Adjustment at site
- Designed digital circuit
- Anti - electromagnetic and RF interference
- Built-in surge protection
- Provide accurate and repeatable data
- Two-wire loop power supply, no polarity connection
- Save installation space
- “slope-restriction” technology

3. Applications

- Blower Centrifuge
- Engine Motor
- Electrical generator Compressor
- Fan Turbocharger
- Turbine Pump

4. Technical Specifications

Measuring range: refer to model selection guide AAA, output 4-20mA signal proportional to vibration velocity.

Accuracy: $\pm 1\%$ (repeatability)

Linearity: $\pm 0.5\%$

Frequency response: 5-1500Hz (120-90000rpm)

Sensing direction: along the sensor's vertical axis

Wide power supply (Vs): 12-30VDC

Lateral sensitivity: less than 5% of sensitivity

Installation resonance frequency: $> 12\text{KHz}$

Sensing component type: high precision digital sensor

Case material: Standard: 304SS

Temperature: $-40^{\circ}\text{C}\sim+85^{\circ}\text{C}$

Stable time: $< 2\text{s}$

Relative humidity: 100%, No immersion

Protection grade: IP66

Explosion proof grade: NEPSI/IECEX/ATEX, Ex ia IIC T4 intrinsic safety

Application in hazards area: Use isolated safety barrier or zenner diode safety barrier

Electrical connection: two-pin MIL

5. Selection Guides:

VT9268E- AAA - BCC □□□-□□□

| AAA | | Measuring range |
|--|--|------------------------|
| Peak value of vibration speed | | |
| 121 | | 25.4mm/s (1.0ips), pk |
| 122 | | 20mm/s (0.8ips), pk |
| 123 | | 50mm/s (2.0ips), pk |
| 124 | | 100mm/s (4.0ips), pk |
| 125 | | 16mm/s (0.6ips), pk |
| 126 | | 10mm/s (0.4ips), pk |
| 127 | | 75mm/s (3.0ips), pk |
| 128 | | 125mm/s (5.0ips), pk |
| Effective value (RMS) of vibration speed | | |
| 151 | | 25.4mm/s (1.0ips), rms |
| 152 | | 20mm/s (0.8ips), rms |
| 153 | | 50mm/s (2.0ips), rms |
| 154 | | 100mm/s (4.0ips), rms |
| 155 | | 16mm/s (0.6ips), rms |
| 156 | | 10mm/s (0.4ips), rms |
| 157 | | 75mm/s (3.0ips), rms |
| 158 | | 125mm/s (5.0ips), rms |
| Peak value of vibration acceleration | | |

| | | |
|---|-----|--------------------------------------|
| | 101 | 1g,pk |
| | 102 | 2g,pk |
| | 103 | 5g,pk |
| Effective value (RMS) of vibration acceleration | | |
| | 131 | 1g,rms |
| | 132 | 2g,rms |
| | 133 | 5g,rms |
| Peak value of vibration displacement | | |
| | 111 | 100um |
| | 112 | 150um |
| | 113 | 200um |
| B | | Mounting bolt |
| | 1 | M6*1 |
| | 2 | 1/4"-28UNF |
| CC | | Explosion-proof Certification |
| | 00 | No explosion-proof certification |
| | 01 | NEPSI, Ex ia IIC T4 |
| | 02 | IECEX, Ex ia IIC T4 |
| | 03 | ATEX, Ex ia IIC T4 |

Interconnecting cable

| 9378 -2AA - BBB □□-□□□ | | |
|-----------------------------|-------------------|--|
| AA | Cable type | |
| 01 | No cable | |
| 11 | Non-armored cable | |
| 21 | Armored cable | |
| BBB= cable length , Unit: m | | |



MIL with Stainless steel flexible tube

| 20936 -XXX - YY.Y □□□-□□□ | |
|---|--|
| XXX= cable length, Unit: m;010 shows that the cable length is 10 meters. | |
| YY.Y= Stainless steel flexible tube length , Unit: m; 09.8shows that flexible tube length is 9.8 m. | |

6. Dimensions (unit: mm)

