

## SVC9235 Signal conditioner for vibration velocity sensor

### 1.Overview

SVC9235 signal conditioner is a digital device adopting microprocessor technology and high accuracy 24 bit ADC and DAC digital circuit, which greatly improve the measurement accuracy and the signal speed and stability. It is designed to receive voltage signal from the vibration velocity sensor in mv/mm/s (or mv/ips) and output a 4-20mA proportional to the vibration velocity expressed in the RMS value or peak. The signal conditioner can be directly connected to any vibration velocity sensor coming from foreign company such as Bently, Metrix, CEC, PCB etc. It has notable features of high accuracy and good stability and can replace the same kind of imported products.

### 2.Features

- Converts mV signal from vibration velocity sensor into 4-20mA signal and transmits it to PLC, DCS or other 4-20mA instrument, providing a DC constant current to the velocity sensor for sensor power.
- Both input and output signal isolated, strong anti-interference ability.
- 24VDC power supply with polarity arbitrary
- Output signal is proportional to vibration velocity
- Optional mounting base or 35mm-DIN rail
- With USB interface, configuration can be done in field.
- Zero or span can be adjusted in field
- With relay output(optional)

### 3.Applications

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

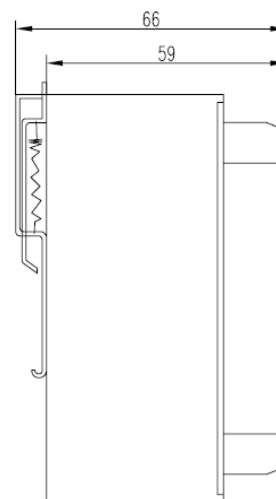
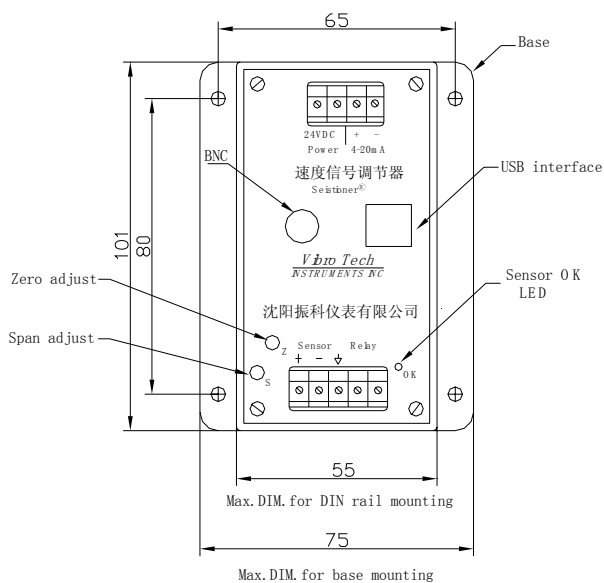


- Pump

#### 4. Technical specifications

- Input: any mV/mm/s voltage signal
- Power supply: 16-30VDC, non-polarity and instantaneous protection, providing a 10VDC, 4mA constant current to the velocity sensor for the power.
- output: 4-20mA
- Measurement range: refer to the selection guide AAA
- Frequency response: 2Hz-2000Hz
- Filter: optional high filter or low filter
- Maximum load resistance: 600Ω
- Isolation: 500V, circuit to case
- Operating temperature: -40°C- +70°C
- Mounting: 35mmDIN-rail or mounting base

#### 5. Dimensions



Unit: mm

**6.Selection guide SVC9235-AAA-BC**

SVC9235 - AAA - B - C	
□□□ -□-□□□	
AAA	Full scale range
201	12.7mm/s (0.5ips), pk
202	25.4mm/s (1.0ips), pk
203	50mm/s (2.0ips), pk
204	75 mm/s (3.0ips), pk
205	100 mm/s (4.0ips), pk
231	12.7mm/s (0.5ips), rms
232	25.4mm/s (1.0ips), rms
233	50mm/s (2.0ips), rms
234	75mm/s (3.0ips), rms

235	100mm/s (4.0ips), rms
B Mounting	
0	Base mounting
1	DIN-rail mounting
C Sensor sensitivity Mv/mm/s	
010	4 mV/mm/s
015	5 mV/mm/s
100	100 mV/mm/s
145	145 mV/mm/s
150	150 mV/mm/s

Notes: User can specify sensitivity.

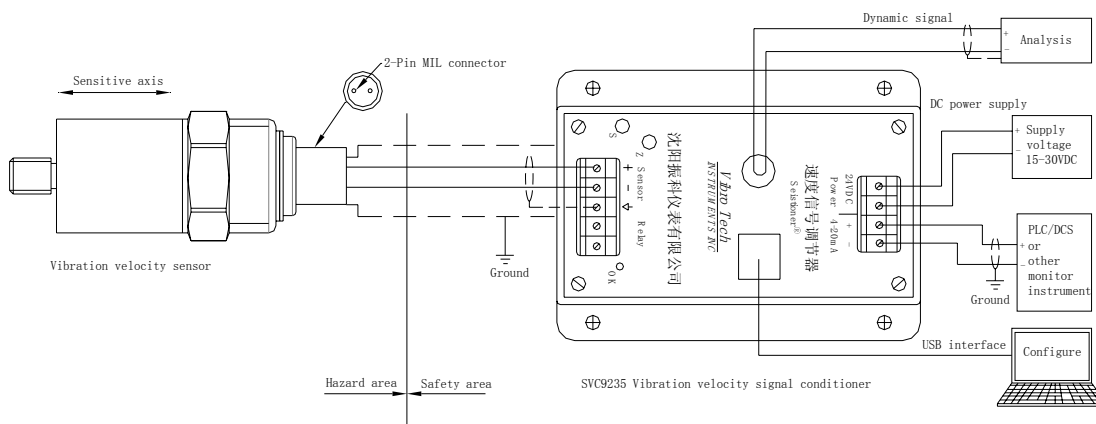


Figure 1: SVC9235 Vibration velocity signal conditioner