



**DIGITAL VIBRATION MONITOR**  
4-20mA Input/Digital Vibration Monitor

MODEL

# 2590B



**In combination with any of the vibration converters, Vibro Converter 2502 Series, this digital allows you to measure and monitor vibrations easily.**

On receiving a 4-20mA signal from a vibration converter, this unit scales it into a vibration value and displays it digitally. This digital vibration monitor also allows you to monitor vibrations with alarm contact outputs in up to two stages. With a built-in operating power supply for vibration converter, this unit is easy to install. It can combine with various vibration converters.

# DIGITAL VIBRATION MONITOR

## 4-20mA Input/Digital Vibration Monitor

# MODEL 2590B

### Features

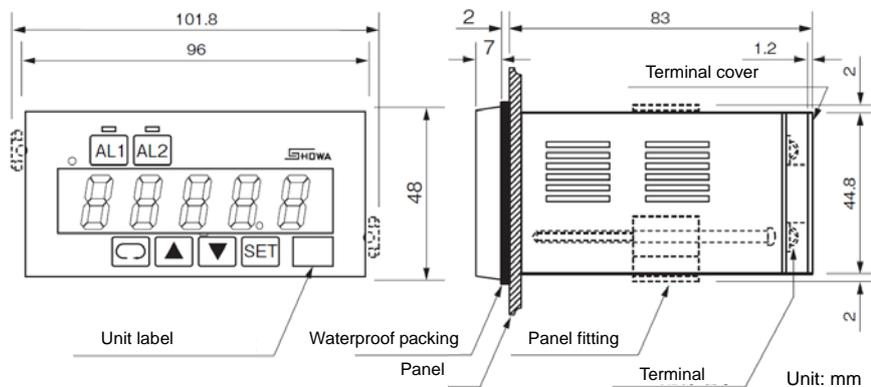
- On receiving 4-20mA signals, this unit scales them into vibration values. The vibration values are digitally displayed on red LEDs.
- It has a built-in power supply for Vibro Converter.
- It has a built-in alarm relay in up to two stages.
- The alarm relay has a built-in delay timer to prevent malfunctions.
- It allows a vibration monitoring system to be built up at low cost.
- Insulated analog outputs 4-20mA, 0-5V, and 1-5V can be taken out onto independent terminals (optional).

### Specifications

Input signal	4 to 20mA (with a zero and span fine-adjustor)
Input resistance	10Ω
Display range*	Configurable from 0 to a desirable full-scale value
Display	7-segment red LED, 5 digits
Display cycle*	Configurable to 0.125, 0.25, 0.5, 1, 2, 3, 4, and 5 seconds; 1 second is the standard
Accuracy	±0.3 ±1 digit (23°C ± 5°C)
Driving power supply for converter	+24V DC, 100mA max.
Alarm settings*	Configurable to any value, up to 2 stages: AL1 and AL2. Automatic reset and self-holding capability
Alarm value checkup	Press the AL1 or AL2 key to display the setting.
Alarm relay	1C contact each. Ratings: 250V AC, 5A; 30V DC, 5A maximum (resistance load)
Alarm delay*	Configurable to a desired value between 0.1 and 99.9 seconds; 5 seconds as the standard
Analog output (OP)	An optional model with insulated analog outputs is available. Output types: 4-20mA (500Ωmax), 0 to 5V, 1 to 5V, 0 to 10V (5kΩ min)
Power supply	85 to 264V AC 50/60Hz, 15VA max. [An optional power supply 24V DC (10W maximum) is available.]
Operating temperature and humidity	0 to 50°C 45 to 85%RH (non-condensing)
Front panel	IP65(need rubber packing)
Weight	Approx. 300g

The items marked \* are factory-configured to the appropriate values.

### Outside dimensions



The specifications and designs described in this catalog are subject to change without notice for product enhancement.

**SHOWA** Respond to the needs; "safe and comfortable"

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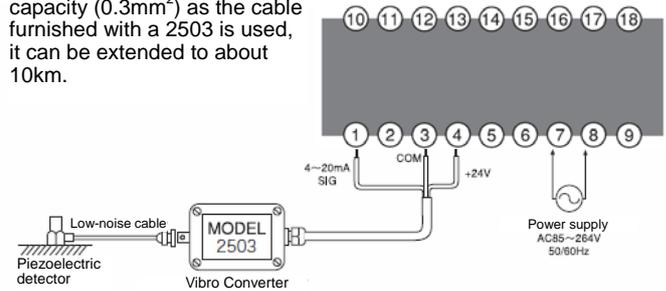
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### Typical connections to a Vibro Converter

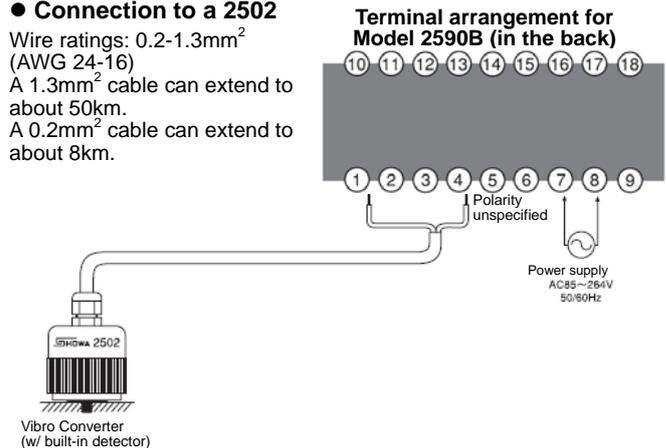
#### ● Connection to a 2503

When a cable having the same capacity (0.3mm<sup>2</sup>) as the cable furnished with a 2503 is used, it can be extended to about 10km.

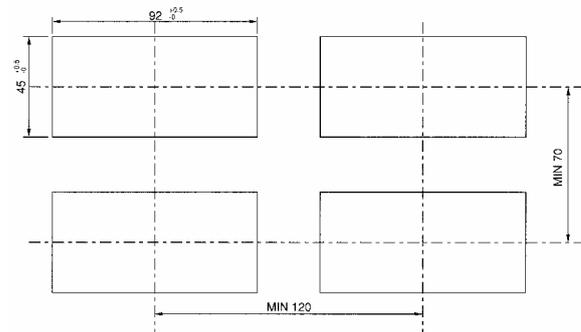


#### ● Connection to a 2502

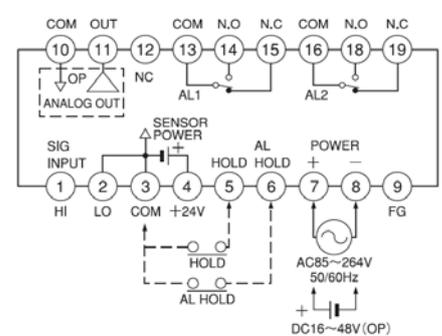
Wire ratings: 0.2-1.3mm<sup>2</sup> (AWG 24-16)  
A 1.3mm<sup>2</sup> cable can extend to about 50km.  
A 0.2mm<sup>2</sup> cable can extend to about 8km.



#### ● Panel cut dimensions



### Terminal arrangement for Model 2590B(in the back)



### Agent: