

VP-1210/1220


Engine Revolution Detector

Instruction Manual

5.ACCESSORIES:

Instruction manual 1 copy.

6.OUTER DIMENSIONS



Warning

Before mounting or removing the sensor, be sure to confirm that the engine has stopped rotating. Otherwise, your fingers or clothes might be pinched and taken into the mechanism resulting in serious injuries.

1.GENERAL

This Detector has been designed as the revolution detector specialized for four cylinder diesel engine and also four cylinder gasoline engine. It is normally fitted to the bolt sections, etc. which are tightened to the cylinder head section of such engine by means of the magnet built into the detector itself thereby detecting the engine revolution.

This detector is small and light and, since it is fitted to the engine by means of the magnet, the handling of it is very simple and easy. Moreover, both the detector and the cable attached to it are of heat-proof design so that they can be used in the engine room without trouble.

2.SPECIFICATIONS

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|----------------------------------|---|
| 1) Objective engine | : 4 cylinder diesel engine.
4 cylinder gasoline engine. |
| 2) Detecting system | : Dynamic-electric type vibration detecting system. |
| 3) Detector fitting point | : Bolt section of the engine cylinder head, or the engine fixing bolts. |
| 4) Detector fitting direction | : Vertical direction. |
| 5) Absorption force for fitting | : In vertical direction; 1.5 kg (W). |
| 6) Measuring range of revolution | : 500~10,000 r/min (16~333 Hz). |
| 7) Detecting sensitivity | : Over 3 V/(m/s) (at RT 10~333 Hz). |
| 8) Output impedance | : Less than 32 kΩ. |

3.GENERAL SPECIFICATIONS

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|-------------------------------------|---|
| 1) Temperature range in use | : 0 ~100 °C. |
| 2) Preserving temperature range | : - 10 ~120 °C. |
| 3) Weight (with cable) | : Approx. 130 g. |
| 4) Length of output cable | : Directly attached (Approx. 2.9 m). |
| 5) Outline dimensions | : See the Outer Dimensions shown below. |
| 6) Applicable equipments (VP-1210): | SE-2500 Engine tachometer. |
| (VP-1220): | AR-7240 Engine tachometer.
CT-6520 Engine tachometer.
SE-1620 Gasoline Engine tachometer. |

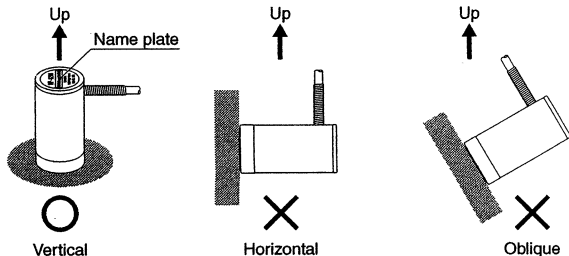
4.HOW TO HANDLE

Fitting of detector and cautions

The detector is fitted simply to the engine (cylinder head section) only by causing the magnet located at the bottom of the detector to adhere to any magnetic substance of the engine such as iron, etc.

As this detector is a dynamic-electric detector utilizing magnet, it is necessary to measure the detected value correctly taking care of the following points:

- (1) Mount the detector to the horizontal surface of a magnetic part of the engine. (Measurement is not possible with the detector mounted to the body or other parts of the vehicle.)
- (2) Before fitting this detector to a point of the engine, always remove any dirt, oil, etc. from that point.
- (3) Fit the detector vertically (the name plate of the detector should be upward) and fit it to any place of magnetic substance.



(4) Slacken the cable of the detector to protect it from being pulled. Also, set up the detector always away from the exhaust pipe and high tension cord. Always keep in mind that the temperature in use of this detector is 0~100 °C.

(5) In case the engine revolution is to be checked at the bench with this revolution detector, it is possible to detect the revolution by fitting this detector to any engine protecting parts only if such parts is fixed to the engine by bolts.

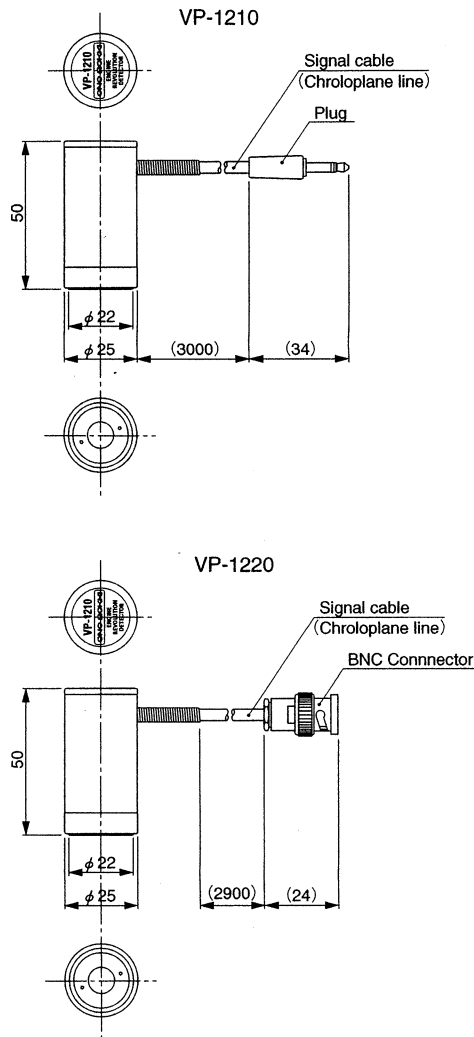
(6) Do not fit this detector to any electric apparatus. (If such electric apparatus is used, noise may be picked up and that may cause erroneous measurement).

(Example)

Distributor Ignition coil Ignition plug Dynamometers , etc.

(7) Do not fit detector to any place near the rotating parts of the engine because it is very danger if the signal cable is caught.

(8) This detector is very unsuitable for any engine of the vehicle. If the actual driving test of such land driving vehicle is wanted, please install this detector with any adhesive agent.



7.WARRANTY

1. This product is covered by a warranty for a period of one year from the date of purchase.
2. This warranty covers free-of-charge repair for defects judged to be the responsibility of the manufacturer, i.e., defects occurred while the product is used under normal operating conditions according to descriptions in this manual and notices on the unit label.
3. For free-of-charge repair, contact either your sales representative or our sales office nearby.
4. The following failures will be handled on a fee basis even during the warranty period.

- (a) Failures occurring through misuse, mis-operation, or modification.
- (b) Failures occurring through mishandling (dropping) or transportation.
- (c) Failures occurring through natural calamities (tires, earthquakes, flooding, and lightning), environmental disruption, or abnormal voltage.

*For repairs after the warranty period expired, contact your sales representative or our sales office nearby.

ONO SOKKI

* Outer appearance and specifications are subject to change without prior notice.
HOME PAGE : <http://www.onosokki.co.jp/English/english.htm>

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