The LG-9200 is a non-contact type optical detector which emits red visible light and detects the reflected light on a rotating shaft. The LG-9200 has a built-in compact amplifier and outputs the square wave (voltage) after waveform shaping.

**Overview**

**Feature**

- Upgraded performances (compared to the previous model LG-916)
  - Detection distance: up to 40 mm
  - Response speed: up to 40 m/s
- Easy to adjust a position by red visible light
- Possible to detect from lower speed almost 0 r/min
- A unified structure of light source, receiver and amplifier
  - (weight: 150 g)
- Provided a drop-proof connector as standard

**Measurement example**

Measuring the rotation speed with the LG-9200

Measures the rotation simply by affixing a 12mm-square reflective mark (HT-011) to a rotating shaft of the object such as a motor or a fan. By using with the digital tachometer, it enables displaying the number of rotation, output of the data.
<Specification>

Detection method: Light reflection using an optical fiber sensor
Light source: Light emitting diode (red visible light)
Detection distance: 20 to 40 mm (recommended distance)
  *when using 12-mm square reflective mark
Max. response speed: 40 m/s
  (converted by the circumferential speed of a rotating shaft)
Measurement range: Refer to the following graph

Output: Rectangular wave  (Hi:+5 ±0.5 V, Lo:+0.5 V or less)
Output impedance: approx. 1 kΩ
Response delay time: 1 ms or less
Vibration resistance: 19.6 m/s² in each of X and Y direction
  (1 hour per each). (JIS C 0911-1960)
Shock resistance: 490 m/s² in each of X and Y direction,
  three times for each of X, Y, and Z directions.
  (JIS C 0912-1960)
Operating temperature range: -10 to +60 °C
Storage temperature range: -20 to +80 °C
Weight: approx. 150 g
Power supply: DC12 V ±2 V
Power consumption: 60 mA or less (at 12 V)
Applicable display: TM series, RV-3150, FV-5300
Applicable FV converter: FV-1400
Applicable standard: CE marking
Accessories: reflective mark x 1, lock nut x 2, instruction manual x 1

<Notice>
・Measurement range may change depending on the quality of the surface materials or color of the object.
・Compliant to CE marking when the LG-9200 is used with the following products by Ono Sokki.

<Outer Dimensions>

<Output circuit>

<Pin Assignment>