

WG314/WG315 Zero Power Consumption Sensor

◆ Features

- No need power supply when it works.
- Bipolar excitation working mode, the sensor outputs a pair of positive and negative electrical pulse signal when the magnetic field polarity changes for a circle.
- Only when the external magnetic field polarity changes, magnetic strength reaches the excitation threshold, the sensor will outputs a pulse signal, so the vibration won't happen. The operation is stable and reliable.
- The signal amplitude has nothing to do with the magnetic field changing speed, and

- it can work at the speed near to zero.
- The signal processing is simple, and it can be directly connected with transistors, comparators, A/D converter, etc.
- The output signal can be remote transmitted by the signal lines, it's suitable for LAN management.
- No mechanic contact, no spark, is a kind of intrinsic safety devices.
- Wide operating temperature range, strong environmental adaptability.

◆ Performance Index

| Name | | Symbol | Value | | Linit |
|---|------|--------|--------------------------|-----------|------------|
| | | | WG314 | WG315 | Unit |
| Excitation strength | Min. | | 3 | | mT |
| | Тур. | В | 5~6 | | |
| | Max. | | 12 | | |
| Pulse signal amplitude | | | ≥2.0 | | V |
| Pulse width (in the location of 1V) | | | 10~30 | | μS |
| DC internal resistance | | | 550~650 | 1200~1400 | Ω |
| Operating frequency | Min. | f | unlimited | | kHz |
| | Max. | | 10 | | |
| Operating Temp. | | | -40~+100 | | $^{\circ}$ |
| Outline Dimension and Typical installation | | | See the figure | | - |
| Sensitive silk location (distance to the bottom | | | Central axis | | - |
| Package | | | heat-shrinkable tubing | | |
| External lead | | | Tinned copper hard leads | | - |

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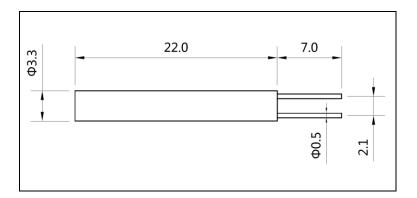
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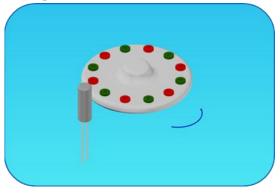


Application

- Large caliber heat meter, industrial flow meter etc.
- Pulse signal generator without power supply.
 - ◆ Sensor dimension and sensitive silk location



- Sensor dimension and sensitive silk location
- WG314/WG315 is suitable for the magnetic field that generated by multi-pole magnet's rotation. It can be applied in industrial flow meter. Before installation, it needs to measure the magnetic strength and adjust the installation distance.
- Note: The sensor has certain requirements to the magnetic strength, too strong or too weak magnetic field may affect its operation.



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