

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		-

NANJING AH ELECTRONIC SCIENCE & TECHNOLOGY CO.,LTD

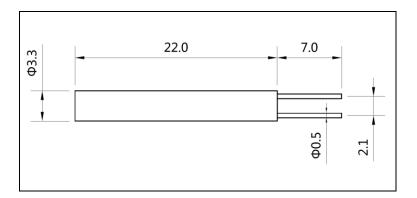
ADD: Building 3, Huaye Park, 8, Zhineng Road, Kylin Technology Innovation Park, Nanjing, China

TEL: 86-25-84670370 FAX: 86-25-84670370 E-mail: nianrong@ahest.com Web: www.ahest.net

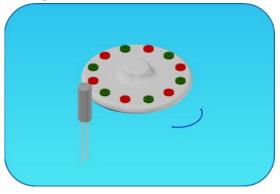


Application

- 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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