

零功耗磁敏传感器选购指南

The Choosing Guide for Zero Power Consumption Magnetic Sensor

零功耗磁敏传感器工作时不需要使用电源，能直接将磁信号转换成电信号。双磁极触发工作方式，触发磁场极性变化一周，零功耗磁敏传感器同步输出一对正负电脉冲。

When the zero power consumption magnetic sensor works, it needn't power supply, it can directly transform the magnetic signal into electrical signal. The working mode is bipolar triggering, it triggers the magnetic field to change for one circle, the zero power consumption magnetic sensor will sync-output a pair of positive and negative electrical pulse.

● 性能特性 Function characteristic

型号 Model	触发磁感应强度 Triggering Magnetic flux density B (mT)			输出幅值 V_0 (V) Output amplitude	脉宽 τ (μ S) Pulse width	工作温度 Operatin g temperat ure T ($^{\circ}$ C)	替换老产品 型号 Replacement type for old model
	最 小 值 Min	最 佳 值 Typ	最大 值 Max				
WG112	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +125	WG102
WG113	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +105	WG103
WG113 A	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +105	WG103A
WG115	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +125	
WG214	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +125	WG204
WG311	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +125	WG101 WG801
WG312	2.5	7~8	12	≥ 1.5	10~ 50	-20~ +125	
WG514	2.5	7~8	12	V_{CC} (注 Note)	20~ 30	-20~ +125	WG504

注：WG514 电源电压 $V_{CC}=3.6\sim 5V$ ，平均功耗电流 $I_{CC}\leq 0.2\mu A$ 。

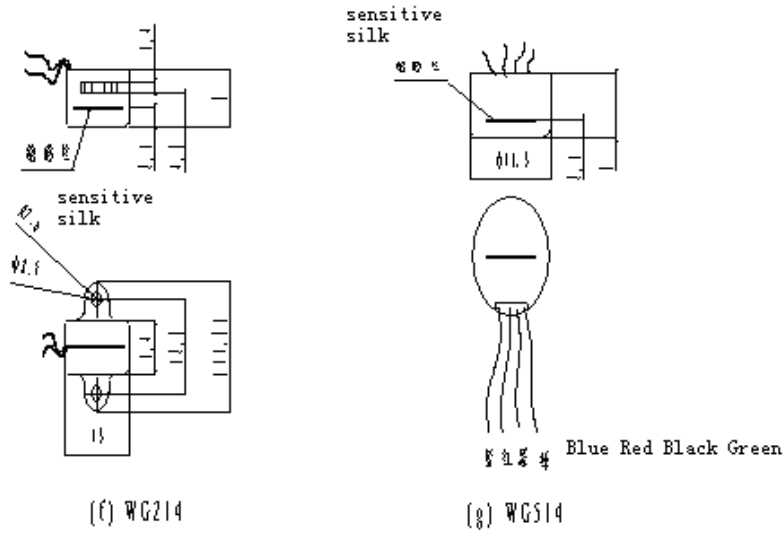
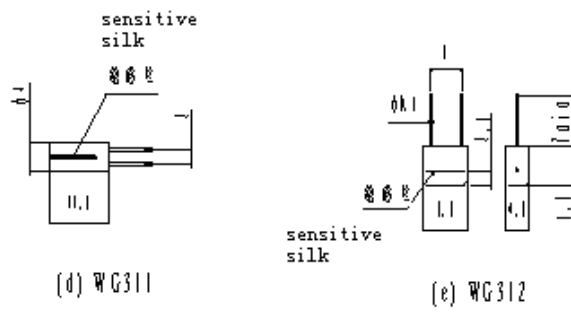
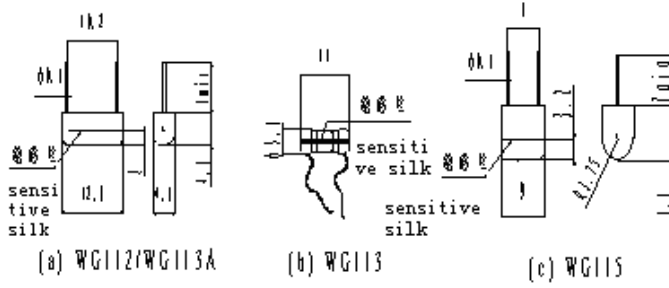
Note: The power supply of WG514 is $V_{CC}=3.6\sim 5V$, the average power consumption current is $I_{CC}\leq 0.2\mu A$.

结构和尺寸 Structure and Dimension

型号 Model	外形尺寸 Dimension (mm)	敏感丝位置 Sensitive silk location	外观 Appearance	外引线 External leading wire
WG112	12.8×4.5×4.5	距底面 2mm It's 2mm from the back surface	塑料外壳 Plastic housing	镀锡铜质硬引线 Rigid tinned copper leading wire
WG113	11× ϕ 3.6	中心轴线 Central axis	两端带磁珠 There are beads in the 2 ends.	高温塑料软引线 Flexible high temperature plastic leading wire
WG113A	12.8×4.5×4.5	距底面 2mm It's 2mm from the back surface	两端带磁珠，塑料外 壳 There are beads in the 2 ends, Plastic housing	镀锡铜质硬引线 Rigid tinned copper leading wire
WG115	9×6.5×7.5	距底面 3.2mm It's 3.2mm from the back surface	塑料外壳 Plastic housing	镀锡铜质硬引线 Rigid tinned copper leading wire
WG214	13×7.4×8	距底面 2.7mm It's 2.7mm from the back surface	带固定孔的塑料外壳 The plastic housing with fixing hole.	双色高温塑料软 引线 Flexible 2-colour high temperature plastic leading wire
WG311	11.5× ϕ 4	中心轴线 Central axis	铝质外壳 Aluminium housing	镀锡铜质硬引线 Rigid tinned copper leading wire
WG312	8.8×4.8×5.8	距底面 2.5mm It's 2.5mm from the back surface	铝质外壳 Aluminium housing	镀锡铜质硬引线 Rigid tinned copper leading wire
WG514	ϕ 16.3×9	距底面 2.7mm It's 2.7mm from the back surface	塑料外壳 Plastic housing	四色塑料缆线 4-colour plastic cable

● 结构示意图 Structure figure

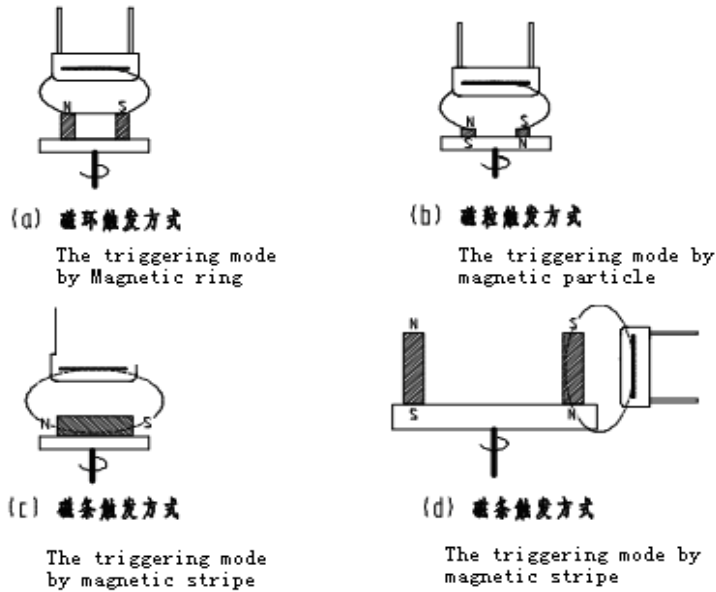
单位 Unit: mm



◇ 触发方式和安装方法 Triggering mode and Method of Installation

典型的几种触发方式和安装方法如下图，可以根据需要选用其中之一。

The typical several triggering modes and Method of installation is as follows, you can choose one among it as your request



◇ 整形电路和输出波形 Shaping circuit and Output waveform

下图为整形电路和对应点的波形示意图。图中元器件参数可根据实际需要作适当调整。

The following figure shows the shaping circuit and waveform of the corresponding point. The parameter of the elements in the figure can be adjusted as the actual demand.

