KESENS

曲轴位置传感器 Crankshaft Position Sensor

产品介绍 Product Description

该产品是基于霍尔原理而设计的，安装于发动机中用于判定曲轴在齿轮旋转时发动机的转速和活塞的相对位置，确定发动机的点火时刻的曲轴位置传感器。

The product is designed based on Hall principle and installed in the engine to determine the engine speed and the relative position of the piston when the crankshaft rotates in gear, The crankshaft position sensor that determines the ignition time of the engine.

产品特征及优势 Feature and benefits

曲轴位置传感器
Crankshaft Position Sensor

- 工作温度范围广，为-40-150℃。
  The working temperature range is - 40-150 ℃.
- 密封、磁操作的非接触式传感，使用寿命长，可靠性高。
  Hermetically sealed, magnetically operated non-contact sensing gives excellent life and reliability.
- 坚固的结构使该传感器非常适合恶劣环境。
  Robust construction makes this sensor well suited to harsh environments.
- 高精度。
  High Accuracy.

产品作用 Application

- 检测曲轴在齿旋转时发动机的转速和活塞的相对位置；确定发动机的点火时刻。
  Detect the rotation speed of the engine and the relative position of the piston when the crankshaft rotates; Determine the ignition time of the engine.

操作 Operation

- **基本原理Basic principle**:

曲轴位置传感器安装在齿轮上，利用脉冲信号感应曲轴位置，判定曲轴在齿轮旋转时发动机的转速和活塞的相对位置；发动机控制单元使用曲轴位置传感器提供的信息生成点火信号和喷射脉冲，分别发送给点火线圈和喷油器。

The crankshaft position sensor is installed on the flywheel, and uses the pulse signal to sense the crankshaft position to determine the engine speed and the relative position of the piston when the crankshaft rotates; The engine control unit uses the information provided by the crankshaft position sensor to generate ignition signals and injection pulses, which are sent to the ignition coil and fuel injector respectively.

- **连接选项 Connection options:**

根据客户选择定制连接系统。
Customized to customer choice of connection system.

- **包装选项 Packaging Options:**

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可提供定制包装以满足任何需要，请联系KESENS技术部了解详情。

Custom packaging can be provided to meet any need, please contact KESENS Engineering for details.

技术参数 Functional Characteristics

参数 PARAMETER	最小值 MIN.	额定值 NOM.	最大值 MAX.	单位 UNITS	备注 COMMENT
工作温度 TEMPERATURE RANGE	-40		150	℃	
供电电压 SUPPLY VOLTAGE	4.75		5.25	V	
供电电流 SUPPLY CURRENT			8	mA	
低电平信号 LOW LEVEL SIGNAL	0		0.7	V	
高电平信号 HIGH LEVEL SIGNAL	4.75		5.25	V	
输出上升时间 OUTPUT RISE TIME	4		17	us	
输出下降时间 OUTPUT FALLING TIME	2		5	us	

可根据需要定制不同量程及电气和环境规范的产品，详情请联系KESENS研发部。

Products with different ranges and electrical and environmental specifications can be customized according to needs. Please contact KESENS design department for details.