

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

- Hall传感技术
Hall effective sensing technology
- 密封非接触式，使用寿命长，可靠性高
Sealed non-contact, long service life, high reliability
- 稳健的结构设计适合发动机恶劣环境
Robust structural design suitable for harsh engine environments
- 精度高、一致性好
High precision and good consistency
- 电磁兼容性好，抗干扰
Good electromagnetic compatibility and anti-interference
- 插头出线方向和角度灵活，安装外形尺寸等可定制
Customized flexible connector outlet orientation and sensor mounting dimensions
- 标准方波输出
Standard square wave output

产品应用 Product 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发动机壳体凸台上对着信号飞轮，传感器根据飞轮上齿和槽输出高低电平脉冲，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控制点火时刻和喷油时间。

The crankshaft position sensor is installed on engine block facing to the flywheel and output the low/high voltage pulse to the flywheel teeth and slot accordingly. Ecu use the crank sensor output to determine the engine speed and the relative position of the piston; The engine control unit uses the information to control the ignition and fuel injection timing.

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

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 Technical 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	°C	
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	
工作气隙 OPERATION AIR GAP	0.4	1.0	1.6	mm	
曲位精度 (上升沿) CRANK POSITION ACCURACY (Rising Edge)	-2.5°		+2.5°	°	

可根据客户需求定制产品，如有需求请联系我们。

Customized products available upon request. Contact us for details.

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