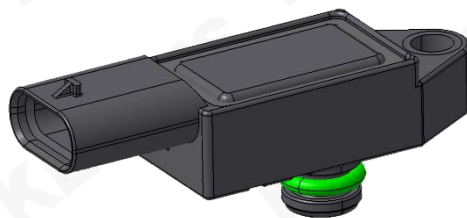


## 曲轴箱通风压力传感器

### Crankcase Ventilation Pressure Sensor



## 产品介绍 Product Description

曲轴箱通风压力传感器检测曲轴箱内压力与大气压力差，通过对曲轴箱内压力来监控活塞环与缸体的泄漏，并控制曲轴箱内气体回收，防止各种油蒸汽污染大气。

The crankcase ventilation pressure sensor detects the pressure difference between inside the crankcase and atmosphere. By detecting crankcase inside pressure, it monitors the leakage of piston rings and cylinder blocks. It also controls gas recovery inside the crankcase to prevent various oil vapors from polluting the atmosphere.

## 产品特征及优势 Feature and Benefits

- MEMS传感技术  
MEMS sensing technology
- 高精度, 优异的长期稳定性  
High accuracy, excellent long-term stability
- 优良的EMC/ESD性能  
Excellent EMC/ESD performance
- 过压和反向极性保护以及短路保护  
Over voltage, reverse polarity and short circuit protection
- 压力范围、输出曲线以及外形尺寸定制化设计  
Customized pressure range, output curve, and housing
- 卓越的耐振性设计  
Excellent vibration resistance design
- 高度模块化产品配置  
Modular product configuration
- 出色的密封设计和防护设计  
Excellent sealing and protective design

## 产品应用 Product Application

曲轴箱内检测活塞环与缸体的压力状况。防止机油变质，防止曲轴油封和曲轴箱衬垫渗漏，防止各种油蒸汽污染大气。

Check the pressure between the piston ring and the cylinder block in the crankcase. Prevent oil deterioration, crankshaft oil seal and crankcase gasket from leaking, and prevent fuel vapors from polluting the atmosphere.

## 操作 Operation

### 基本原理 Basic Principle

燃油燃烧过程中产生的活塞环漏泄气体(燃烧气体成分其经由活塞进入曲轴箱)不得在非受控的情况下排放至空气中。因此，曲轴箱通风装置一方面用于将此类气体重新通入燃烧装置，另一方面负责控制曲轴箱内的负压。

测量曲轴箱内的压力与大气压力的压差并以信号形式发送至发动机控制装置。发动机控制装置利用该信号识别曲轴箱通风装置是否泄漏。

Piston ring leakage fuel vapor (combustion gas composition, which enters the crankcase through the piston) generated during fuel combustion shall not be discharged into the air under any uncontrolled conditions. Therefore, on the one hand, the crankcase ventilation is used to re-introduce such vapors into the combustion system, on the other hand, it is responsible for controlling the negative pressure in the crankcase.

Measure the pressure difference between the pressure in the crankcase and the atmospheric pressure and send it to the engine control unit in the form of electrical signal. The engine control unit uses this signal to calculate and control the crankcase ventilation.

### 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.

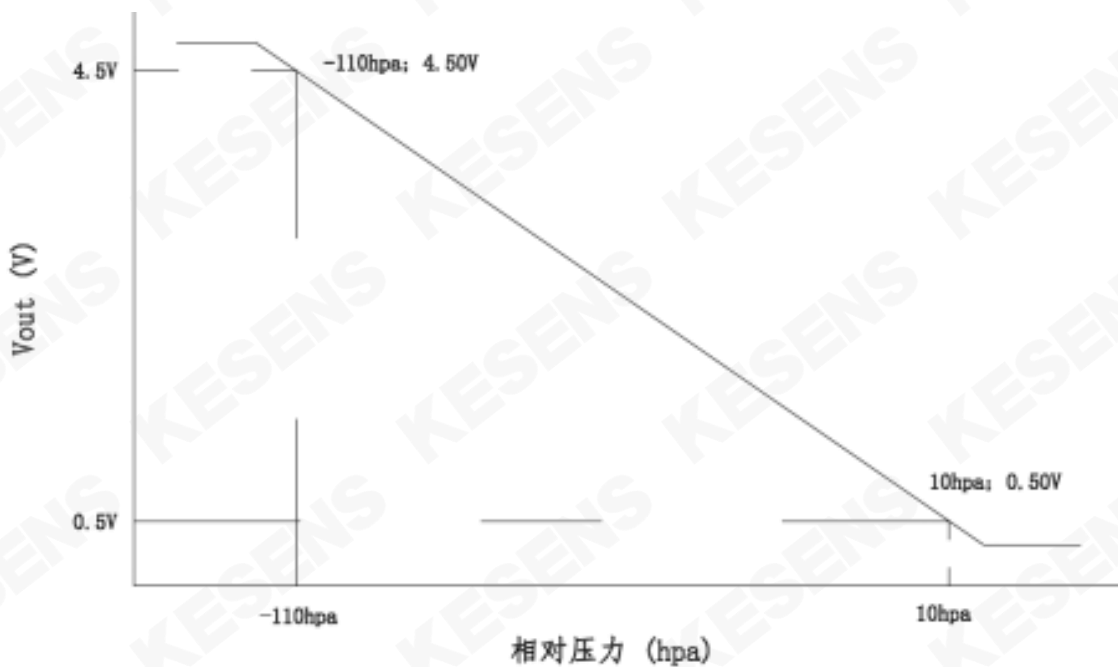
### 包装选项 Packaging Options

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                      | 符号SYMBOL         | 最小值MIN. | 额定值NOM. | 最大值MAX. | 单位UNITS |
|----------------------------------|------------------|---------|---------|---------|---------|
| 工作温度<br>TEMPERATURE RANGE        | T                | -40     |         | 130     | °C      |
| 压力测量范围<br>PRESSURE RANGE         | P                | -110    |         | 10      | hPa     |
| 电源电压<br>SUPPLY VOLTAGE           | Vcc              | 4.75    | 5       | 5.25    | V       |
| 供电电流<br>SUPPLY CURRENT           | I <sub>sup</sub> |         | 8       | 10      | mA      |
| 额定输出电压<br>NOMINAL OUTPUT         | V <sub>out</sub> | 10      |         | 90      | %Vcc    |
| 输出电压上限值<br>UPPER CLAMPING LEVEL  | VCL-HI           | 4.67    | 4.7     | 4.73    | V       |
| 输出电压下限值<br>LOWER CLAMPING LEVEL  | VCL-LO           | 0.27    | 0.3     | 0.33    | V       |
| 整体精度误差<br>OVERALL ACCURACY ERROR | Err              |         |         | 3.4     | %Vcc    |
| 过压压力<br>OVER PRESSURE            | P <sub>max</sub> |         |         | 2*P     | KPa     |
| 爆破压力<br>BURST PRESSURE           | P <sub>b</sub>   |         |         | 3*P     | KPa     |



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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