

空调压力传感器 Air Conditioning Pressure Sensor

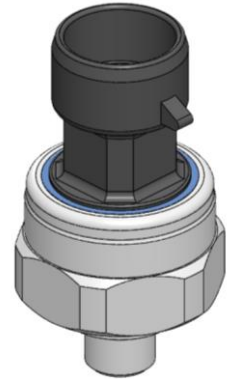
产品介绍 Product Description

空调压力传感器检测空调压力信号，提供给空调控制器。

The pressure sensor detects the pressure signal and provides it to the air conditioning controller.

产品特征及优势 Feature and benefits

- ◆ 可以提供模拟信号或者数字信号。
The sensor provides analog signal or digital signal.
- ◆ 采用陶瓷电容技术，兼具高精度和优良的稳定性,对几乎所有汽车压力介质均有极佳的兼容性。
With ceramic capacity technology, with both high accuracy and long-term stability. Ceramic has excellent compatibility with almost all automotive pressure media
- ◆ 0~4MPa 范围内，压力量程可定制。
Pressure can be customized in the range of 0~4MPa.
- ◆ 0.5V~4.5V 范围内电压输出，提供适当诊断。
Output with 0.5V~4.5V voltage single, with diagnosis function.
- ◆ 防护等级可达到 IP69。
Protection degree with IP69.
- ◆ 接插件及压力接头可定制。
Connector and pressure port can be customized.



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产品作用 Application

检测空调管道内的冷媒压力，通过调理电路转化为电信号并输出给空调控制器，空调控制器结合其他信号输入，调整执行机构，从而保证温度在乘员舒适的区间。

Detect the pressure of refrigerant media, and transfer to electrical signal to AC controller with condition module. The controller will combine other signals input, and then control the actuator, to make sure the air temperature falls into comfortable zone for all passengers.

操作 Operation

◆ 基本原理 Basic principle:

空调压力传感器根据感应管道内介质压力的变化，导致陶瓷应变膜的变形，使电容值发生改变，通过调理电路的处理放大，转为电压信号。

According to the change of the medium pressure in the induction pipe, the air conditioning pressure sensor will lead to the deformation of the ceramic strain film and change the capacitance value, which will be amplified by the conditioning circuit and converted into a voltage signal.

◆ 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.

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◆ 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 Functional Characteristics

参数 PARAMETER	符号 NOTE	最小值 MIN.	额定值 NOM.	最大值 MAX.	单位 UNITS
工作温度 TEMPERATURE RANGE	T	-40		150	°C
压力测量范围 PRESSURE RANGE	P	0		4	Bar
电源电压 SUPPLY VOLTAGE	Vcc	4.75	5	5.25	V
供电电流 SUPPLY CURRENT	Icc			10	mA
额定输出电压 NOMINAL OUTPUT	Vout	5		95	%Vcc
过压压力 Proof Pressure				2*P	MPa
爆破压力 Burst Pressure				3*P	MPa
过电压 Over Voltage				20	V
反向电压 Reverse voltage		-20			V
整体精度误差 OVERALL ACCURACY ERROR	Err		±3		%Fs
压力响应时间 PRESSURE RESPONSE TIME	从 10%到 90%的最输出电压 T _{10/90} 10% TO 90% OF THE FINAL OUTPUT VALUE			10	mS

可根据需要定制电气和环境规范，详情请联系KESENS技术部。

Custom electrical and environmental specifications can be designed to meet any need, please contact KESENS Engineering for details.