

# AUTOMOBILE AIR CONDITIONING PIPELINE PRESSURE SENSOR

## 汽车空调管道压力传感器

AA-R-B032A-04-01-A1

【AA系列--汽车空调系列 Automobile Air Conditioning Series】

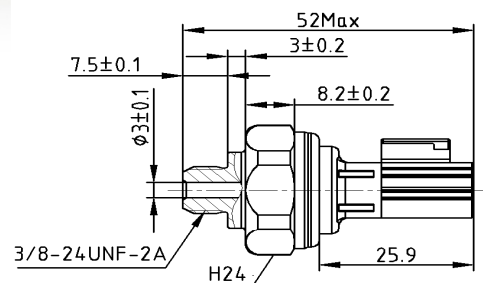
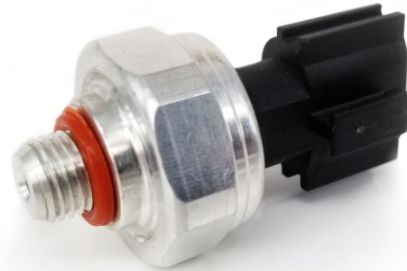
### 产品功能 | PRODUCT FEATURES

汽车用空调压力传感器可以测量空调系统冷媒压力，以供ECU进行实时监控、优化系统控制策略、降低怠速，节约能耗。

Air conditioning pressure sensor can measure the refrigerant pressure of the air conditioning system, and for ECU to act the real-time monitoring optimizing the controlling strategy, reducing the idle speed, saving energy consumption.

测量精度高，能够保证ECU对空调系统实现优化控制策略；根据客户选择，有PWM或电压输出接口型式；陶瓷电容结构，响应速度快，对测量介质兼容性好。

Air conditioning system of high accuracy, can guarantee the ECU to implement optimization control strategy; According to customer selection, there is a PWM or voltage output interface type; Ceramic capacitor structure, fast response, good compatibility of medium.



### 工作参数 | WORKING PARAMETERS

- ◇ 工作压力：0.25~3.2Mpa (范围可调整)
- ◇ 精度：±1.0%F.S.(线性,迟滞性,重复性,标定)
- ◇ 全误差带：±1.5%F.S.(-20°C~+85°C)  
±2.5%F.S.(-40°C~+135°C)
- ◇ 运行温度：-40°C~+135°C
- ◇ 存储温度：-40°C~+150°C
- ◇ 保护压力：9.2Mpa
- ◇ 爆破压力：13.8Mpa
- ◇ 工作介质：HFC134a, PAG Oil
- ◇ 使用寿命：五百万次全量程循环
- ◇ 振动：11g (50~2000Hz)
- ◇ 电气接口：YAZAKI RK03FB
- ◇ 防护等级：IP65
- ◇ 壳体材质：A6061-T6铝合金
- ◇ 压力连接：3/8-24UNF-2A
- ◇ 供电电压：5.0±0.25VDC
- ◇ 输出电压：0.5~4.5VDC (5V范围内可调整)
- ◇ 供电电流：10mA(最大)
- ◇ 负载阻抗：10KΩ(典型)
- ◇ 输出响应时间：3mS
- ◇ 过压保护：16VDC
- ◇ 反向电压：-14VDC
- ◇ 短路保护：有
- ◇ EMC(512MHz—1GHz):50V/m
- ◇ EMC(1MHz—512MHz):100V/m
- ◇ ESD:15KV
- ◇ Operating pressure range: 0~4.6Mpa(range is adjustable)
- ◇ Accuracy: ±1.0%F.S.(Linearity,Hysteresis,Repeatability, Calibration)
- ◇ Total error band: ±1.5%F.S.(-20°C~+85°C)  
±2.5%F.S.(-40°C~+135°C)
- ◇ Operating temperature: -40°C~+135°C
- ◇ Storage temperature: -40°C~+150°C
- ◇ Protect pressure: 9.2Mpa
- ◇ Burst pressure: 13.8Mpa
- ◇ Operating medium: HFC134a,PAG Oil
- ◇ Life cycle: 5 million cycles
- ◇ Vibrating:11g(50~2000Hz)
- ◇ Electrical connectors:YAZAKI RK03FB
- ◇ Ingress Protection:IP65
- ◇ Shell material:A6061-T6 Aluminum Alloy
- ◇ Pressure connection:3/8-24UNF-2A
- ◇ Supply voltage:5.0±0.25VDC
- ◇ Output voltage: 0.5~4.5VDC (Can be adjusted within 5VDC)
- ◇ Supply current: 10mA (Maximum)
- ◇ Load impedance: 10KΩ(Typical)
- ◇ Output response time:3mS
- ◇ Overvoltage protection: 16VDC
- ◇ Reverse voltage protection: -14VDC
- ◇ short-circuit protection: Yes
- ◇ EMC withstand(512MHz—1GHz):50V/m
- ◇ EMC withstand(1MHz—512MHz):100V/m
- ◇ ESD withstand:15KV