

真空度压力传感器 Vacuum Pressure Sensor

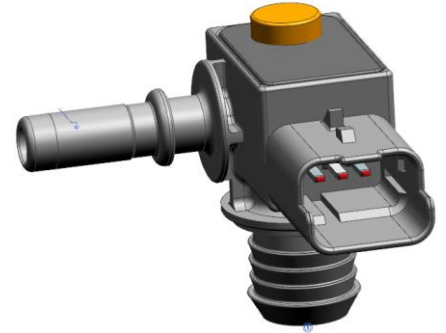
产品介绍 Product Description

真空度压力传感器是用于监测真空助力器内的相对压力的传感器

The vacuum pressure sensor is used to monitor the relative pressure in the vacuum booster.

产品特征及优势 Feature and benefits

- ◆ VBS 可以提供一个信号。
VBS can provide a signal.
- ◆ 压力感应元件并经芯片处理后的真空制动助力器内部相对压力信号。
Internal relative pressure signal of vacuum brake booster after pressure sensing element and chip processing t.
- ◆ 外观和客户接口可以与 Bosch 产品兼容。
Performance and customer interface compatible with Bosch TMAP.
- ◆ 单芯片解决方案，电路单元利用 SMT 技术贴装。
Single chip solution , SMT for EMA fabrication process.
- ◆ 利用防水透气膜防止粉尘与水汽进入。
Use waterproof and breathable film to prevent dust and moisture from entering.
- ◆ 根据客户要求，多种量程可选（-100-0 kpa , -105-0 relative）。
Different pressure ranges are available on customer request.



真空度压力传感器
vacuum relative pressure sensor

产品作用 Application

真空度压力传感器通过检测汽车真空助力器压力值，并输出给启停系统。

The vacuum pressure sensor detects the pressure value of the vehicle vacuum booster and outputs it to the start stop system.

操作 Operation

◆ 基本原理 Basic principle:

真空度压力传感器通过压强差检测汽车真空助力器压力值，即大气压与真空助力器压强差，将压力大小转化为电信号，并输出给启停系统，进而达到节约能耗的目的。

The vacuum pressure sensor detects the pressure value of the vehicle vacuum booster through the pressure difference, that is, the pressure difference between atmospheric pressure and vacuum booster, converts the pressure into an electrical signal and outputs it to the start stop system, so as to save energy.

◆ 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:

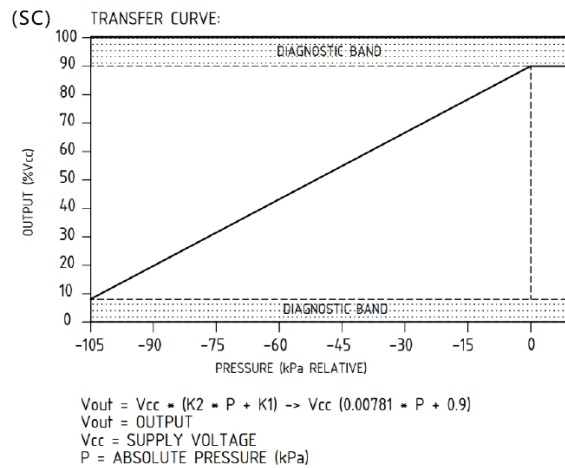
真空度压力传感器 Vacuum Pressure Sensor

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	-30		110	°C
压力测量范围 RELATIVE PRESSURE RANGE	P	-105		0	kPa
电源电压 SUPPLY VOLTAGE	V _{cc}	4.75	5	5.25	V
电源电流 SUPPLY CURRENT	I _{cc}		8	10	mA
输出负载电流 OUTPUT LOAD CURRENT	I _L	-1		1	mA
负载电阻 LOAD RESISTANCE	R _{pull-up}			100	kΩ
	R _{pull-down}			100	kΩ
额定输出电压 NOMINAL OUTPUT	V _{out}	10		90	%V _{cc}
输出电压上限值 UPPER CLAMPING LEVEL	V _{CL-HI}	4.77	4.8	4.83	V
输出电压下限值 LOWER CLAMPING LEVEL	V _{CL-LO}	0.27	0.3	0.33	V
整体精度误差 OVERALL ACCURACY ERROR	Err			2.2	kPa
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			5	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.