

SUL802 Series Ultrasonic Distance Level Switch Sensor

MAIN FEATURES

- Built-in temperature compensation
- Adjustable detection range
- Brass nickel plated case can be customized stainless steel case
- Protection class IP67
- Anti-reverse connection protection, instantaneous over voltage protection



OVERVIEW

SUL802 Ultrasonic Level Transmitter combines ultrasonic sensors, temperature sensors, ultrasonic servo circuit, transmission circuit and uses SMD components and ASIC which is developed together with the Gemany partner. All gold-plated circuit boards, internal electromagnetic shielding and software digital filter are tested for (industrial) 48 hour under high and low temperature aging.It promises higher and long-term reliability. Shell is made of solid texture and good NLEPF acoustic characteristics of synthetic material.

SPECIFICATION

Model types	See next page
Standard test board	300*300mm
Repeatability	0.3% F.S
Operating Voltage	10 ~ 30V DC or 15 ~ 30V DC
Temperature drift	0.05%/° C (temperature compensation)
Linearity	<1%
Resolution	0.1% of range (0.5mm min)
Electromagnetic Compatibility	GB / T17626.2-2006 / GB / T17626.4-2008
Power consumption	20ma
Load	Current output: <500Q, Voltage output:> 5KQ
Protect the circuit	Anti-reverse protection, transient over-voltage protection
Working temperature	-20 ° C ~ + 60 ° C, -20 ° C ~ + 80 ° C
Storage temperature	-40 ° C ~ + 70 ° C
Housing material	ABS, Copper nickel plating, Stainless steel etc.
Protection class	IP67
Connection	M12 aviation plug, 4 or 5 pin, direct cable
Cable length	Default 2 meter (Support customized as request)
Signal output	Analog output: 4~20mA, 0~10V, 0~5V Digital output: RS485 (Modbus RTU), TTL Relay output: PNP, NPN, 2-route PNP, 2-rout NPN

DESIGN TYPES



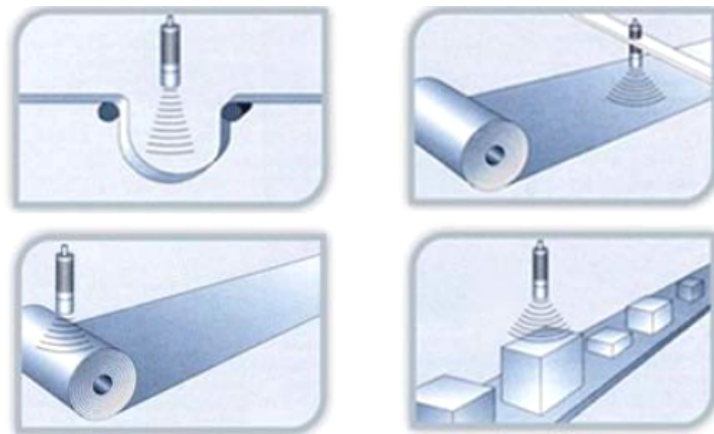
Connector type



Direct cable type

Model	SUL802-1M	SUL802-2M	SUL802-4M
Picture			
Dimension			
Measuring range	60~1000mm	100~2000mm	250~4000mm
Blind zone	0~60mm	0~100mm	0~250mm
Angle	10°	15°	25°
Response time	125m	125m	225m

INSTALLATION EXAMPLE



Remarks:

To prevent sensor malfunction, operational malfunction, or deterioration of its characteristics, do not use the sensor in the following or similar situations:

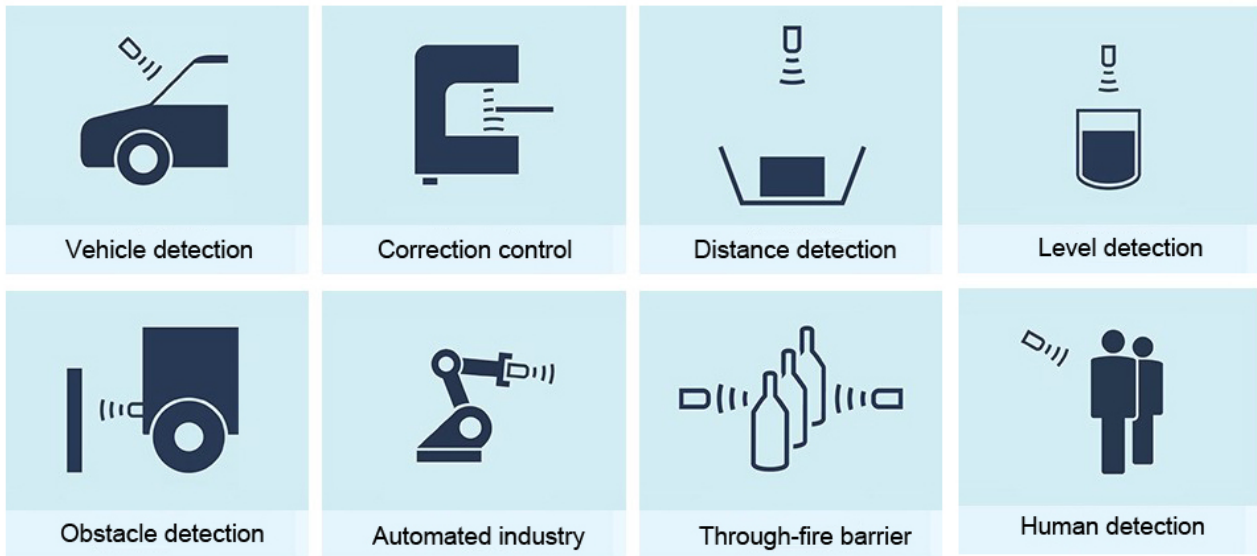
1. Since the ultrasonic sensor is directional, be sure to pay attention to its installation position. It is recommended that the installation position be perpendicular to the object to be measured.
2. To ensure reliability and service life, please do not use and store above the rated temperature.
3. The sensor cannot be used in vacuum area or explosion-proof area.
4. Do not use it in an environment where the temperature gradient is generated by uneven atmosphere, which will lead to measurement errors.
5. The product shall not be used in the environment of dissolved organic matter or stored in corrosive gas, especially hydrogen chloride gas, hydrogen sulfide.

Gases, acids, bases, salts or the like are present. Products stored in the warehouse should pay attention to normal temperature and humidity, and please pay attention to moisture-proof during storage to prevent pin oxidation. Under sudden changes in temperature and humidity, this can lead to product failure or malfunction.

6. When installing the product directly to the circuit board or adding a casing, please add a buffer material between the sensor and the circuit board as an improvement measure. At the same time, the sensor should not have strong mechanical vibration, and the working environment should not have strong electromagnetic interference.

If it is applied to special conditions such as non-standard frequencies, please inform our company of the specific working conditions, circuits, etc. you need, so that we can design and manufacture sensor products that meet your specific use requirements.

APPLICATION



ORDER CODE

SUL802	ultrasonic level switch sensor						
	CODE	Model code					
	Model	SUL802-1M					
		SUL802-2M					
		SUL802-4M					
		Support more model range customized					
	CODE	Working temperature					
	A	-20 ° C ~ + 60 ° C					
	B	-20 ° C ~ + 80 ° C					
		CODE	Electric connection				
		M	M12 aviation plug 4 or 5 pin				
		D	Direct cable				
		CODE	Shell material				
			A	ABS			
			C	Copper nickel plating			
			S	Stainless steel			
CODE		Signal output					
		A	Analog output: 4~20mA, 0~10V, 0~5V				
		D	Digital output: RS485 (Modbus RTU), TTL				
	R	Relay output: PNP, NPN, 2-route PNP, 2-rout NPN					
SUL802	1M	A	M	C	D	Order code	