Tianjin Yolin Technology Co.,Ltd.

Technical Specification

Product Name: SM-07 Pas Sensor

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Contents

1. General

In order to fully describe the technical specifications referred to in technical cooperation, a complete set of documents is usually required. As part of this specification, the technical specification for the Pas sensor is binding on this type of component.

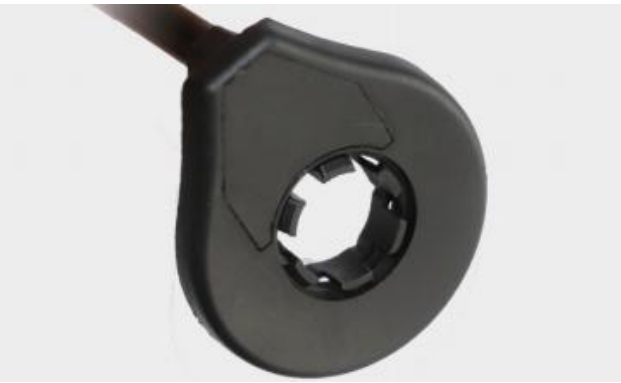
2. Standard

water proof test: GBT4208-2017

3. General specifications

Function and test items	Test method and condition description	Min.	Typ.	Max.	Unit
Operating Voltage	The normal operating voltage range of the sensor	4.5V	5	5.5	V
Inverse Voltage	Maximum allowable inverse voltage value			-5	V
Operating Current				10	mA
Rotate Speed	Range of spindle speeds		90	120	RPM
Working Temperature	The allowable operating temperature range of the product	-30	25	80	℃
Output High Level	Range of output value when the sensor is not connected to load	4.8	5	5.2	V
Output Low Level	Range of output value when the sensor is not connected to load	0		0.2	V
Forward Duty Cycle	Duty cycle of output signal at steady speed of central shaft	20	25	30	%
Reverse Duty Cycle	Duty cycle of output signal at steady speed of central shaft		0		%

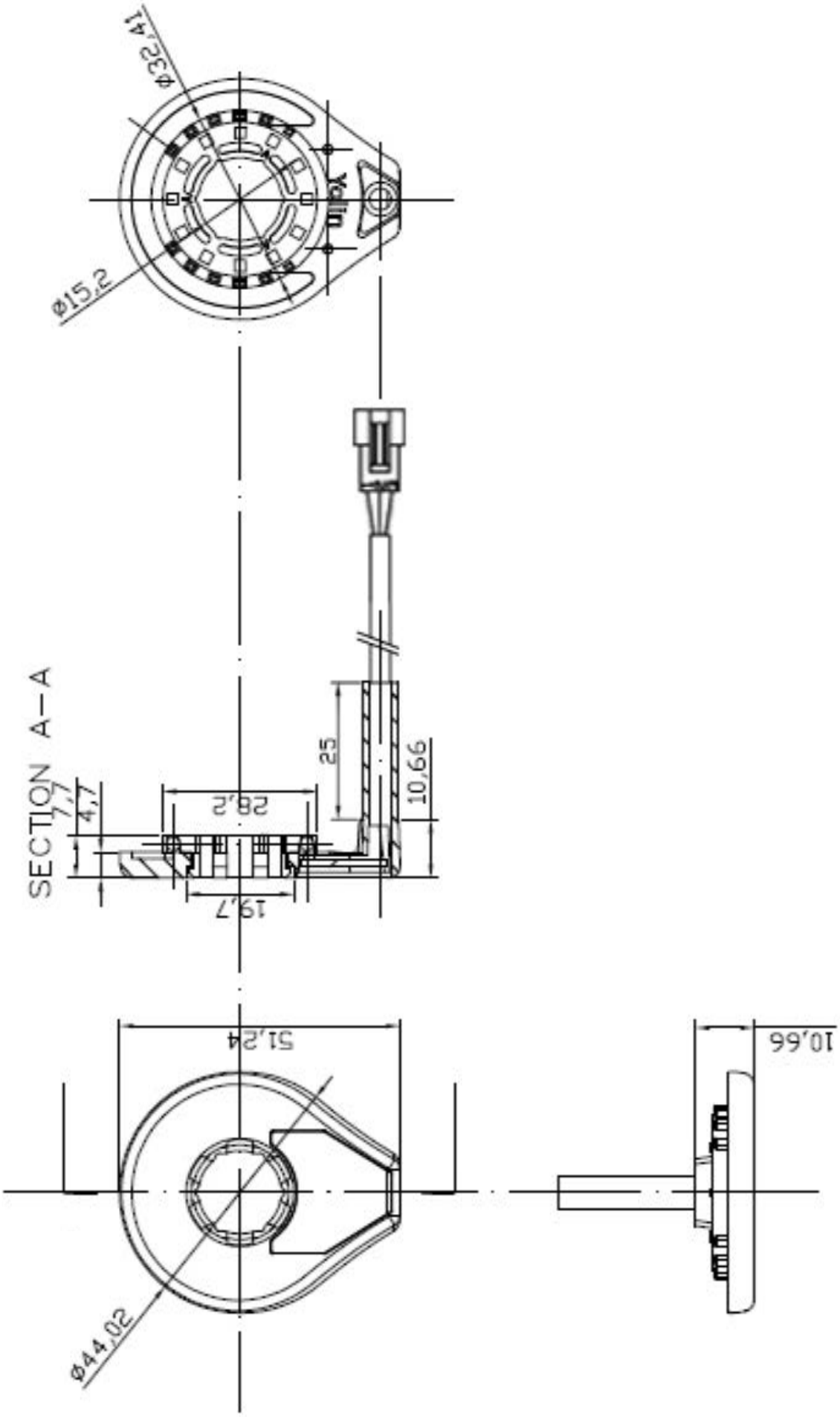
4. Product picture



5. Type test

Items	Test Method	Test Result
Vibration Test	In standard environment, it is fastened on the shaking table in a large plane direction, and the frequency of the shaking table is 10-55 Hz, and the frequency sweep rate is 10 CT/min.The double amplitude is 1.5mm, the vibration direction is Z-> X->Y, and the vibration direction is 2h.	After the test, the parts are not damaged, the duty cycle is uniform and there is no loss of signal
High Temperature & Humidity Test	When the ambient temperature reaches 55±2℃, the relative humidity is 90%-95%, transmission Sensors should continue to work normally for 2H.	All functions were normal after testing
High And low Temperature Aging Test	Test at 80℃ continuously for one week -40℃ continuous test for a week	All functions were normal after testing
Drop Test	Free fall at 1 meter height for 3 times, Z->Y->X	All functions were normal after testing
Waterproof Test	Placed in the water tank under power off condition, the top end of the shell is required to be 100mm away from the water surface, the water depth is 1 meter, and the test is 30min	All functions were normal after testing
Corrosion Resistance	The test sample was placed in the salt spray test chamber and tested for 24min	CASS≥6
Flame Resistance	Refer to GB/T 5169.16 for testing	The burn class is V-1

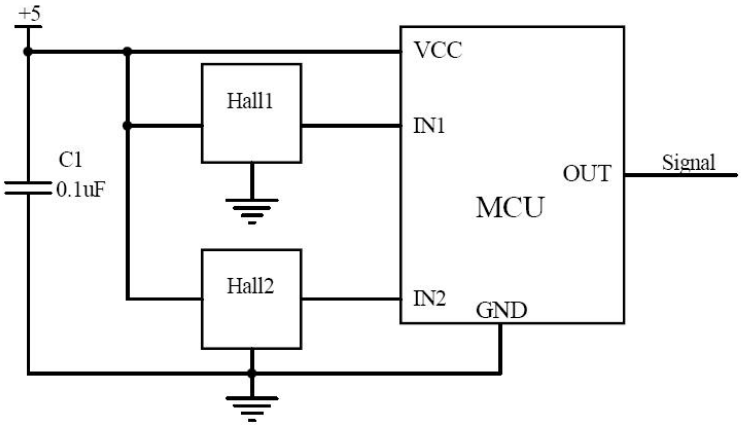
6. Product dimension



Appearance and dimensions（Unit: mm）

7. Work principle

Sensor schematic diagram



8. Considerations

1. Sensor leads are connected correctly and reliably without loosening.

2. Please handle the sensor gently. Do not use mechanical tools to press the sensor body during installation, otherwise the chip or component will be damaged and the function will be abnormal

3. Do not use mechanical tools to press the magnet area during installation, otherwise the magnet will be damaged and the signal will be abnormal

4.The power supply voltage of the sensor should be within a reasonable range, otherwise it will affect the normal operation of the sensor.

5.You should wear electrostatic bracelet during installation, otherwise it may cause damage to the components and affect the normal function.