# WET18S-SOX5.5

■Character

- Non-contact digital potentiometer
- High precision, long life
- Any electrical Angle choice, customized for you
- Cable discharge mode: Side cable discharge

■Electrical connection

Outgoing terminal name	Exit connection
V (+)	Power +: 5VDC
G (−)	Power −: 0VDC
O (OUT)	Output pin: PWM 250Hz

■Dimensions
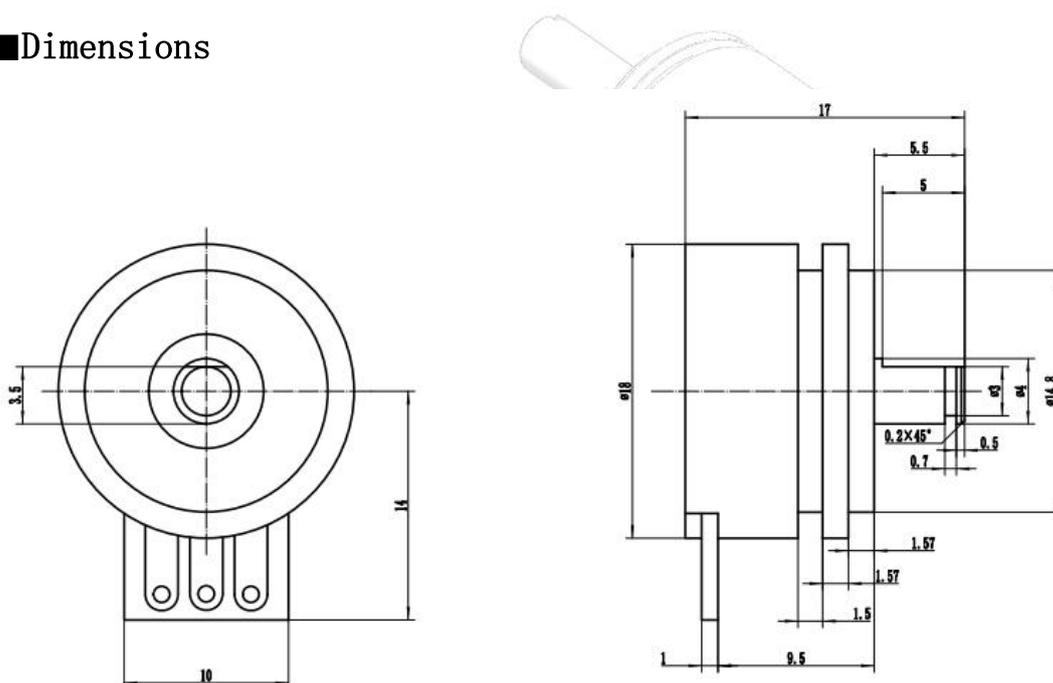
■General parameter

Mechanical Travel	360° （endless）	Life Expectancy	Theoretical infinite
Operating Temperature	−40℃~+125℃	Rotational speed	<30000RPM

		RS	
Storage temperature	−40℃~+125℃	Shell	Aluminum
Running torque	<5mN·m	Shaft	Stainless iron

■Electrical parameter

Electrical Travel	356°
Independent Linearity	±0.3%
Resolution	4096（12 bits）
Operating voltage	5VDC
Output signal	PWM 250Hz
Max operating current	<10mA
Initial terminal output deviation	<10mV
Load resistance	>5KΩ
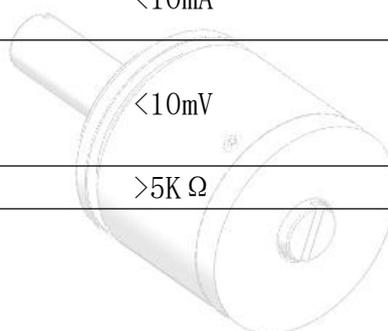
■Optional Features

Electrical part	Output range	Standard output 0~100% (customizable)
	Output direction	The standard is clockwise signal output, but it can also be set to counterclockwise signal output
	Other output modes	Current such as :4~20mA output, PWM output...
	Special shaft	Special shaft length, special shaft diameter, or special machining on the shaft can be done according to customer requirements

18 type digital potentiometer test method
1. Required tools, instruments and equipment
    A small flat-blade screwdriver, a thermal melt gun, a Tektronix oscilloscope, a DC regulated power supply, and an electric rotary digital display indexing table.
2. Measurement

1. First fix the potentiometer to be measured on the electric rotary indexing table, and fix it with hot melt glue to prevent errors caused by tooling gaps when adjusting the angle;

2. Connect the power lines V and G of the potentiometer to the DC regulated power supply, connect the output signal lines O and G to the first probe of the oscilloscope channel, and turn on the power switch of the oscilloscope to preheat in advance;

3. Turn the output adjustment knob of the DC stabilized power supply to the minimum, then turn on the power supply, and adjust the output voltage to 5VDC;

4. Observe the oscilloscope and record the PWM frequency;

5. Rotate the indexing table to make the potentiometer rotate clockwise, and observe whether the signal duty ratio gradually increases;

6. Rotate the indexing table to find the position with a duty cycle of 5%, and the angle display of the indexing table returns to zero;

7. One test point at 10°, record the angle and duty cycle data;

8. Calculate the angle deviation after the test is completed. If the angle deviation is less than 0.7°, the potentiometer is judged to be qualified.