Ziasiot

Instructions

Instructions for use of the rotary level switch

attestation

ISO 9001:2015

Please read this instruction manual carefully before installation

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Product Introduction

Rotor switch is used for solid materials (including powder, block, granular, gel, etc.) level controller. It has the characteristics of good sealing, strong overload capacity, light and easy to install, and large output contact capacity. Materials with different specific gravity can be realized by adjusting the tension of the spring, and the contact material part is made of stainless steel. Rotor switches have been widely used in chemical, plastic, cement, pharmaceutical, feed, food and other industries.

Product Features

1. American small hopper professional technology, 3 a bearing support, more reliable operation.
2. The original sealing design can prevent dust infiltration (patent actual).
3. The torque is stable and reliable and the torque can be adjusted.
4. The blade bears excessive load, and the clutch automatically slips to protect the motor from damage.
5. Mechanical and electrical separation type structure, the whole free disassembly and easy maintenance.
6. The junction box IP65 protection level, good sealing, can be used outdoors.
7. Special blades can be used for low density materials.

Working Principle

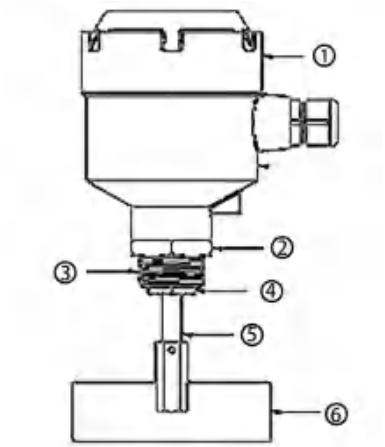
The vane of the rotary material level switch is connected with the clutch by the drive shaft. When the vane does not touch the material, the motor keeps running normally; when the vane touches the material, the motor power is disconnected and stops the movement, and the mechanism outputs a contact signal at the same time to indicate that the material level has reached the set height.

Technical Parameters

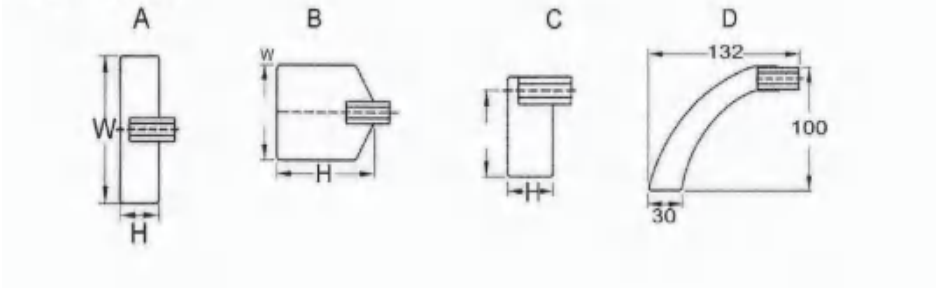
Power supply	220VAC/24VDC/110VAC
Power consumption	4W
Contact capacity	SPDT 5A/250VAC
Blade speed	1RPM
Withstanding voltage	AC 1500V×1minute
Measuring torque	1.0 N·m
Applicable Specific Gravity	0.5g/cm3 or more
Operating Temperature	-20～80℃ / High Temperature Type -20～400℃

Overall Structure Diagram

As shown in the figure, the rotary level switch consists of the following components:



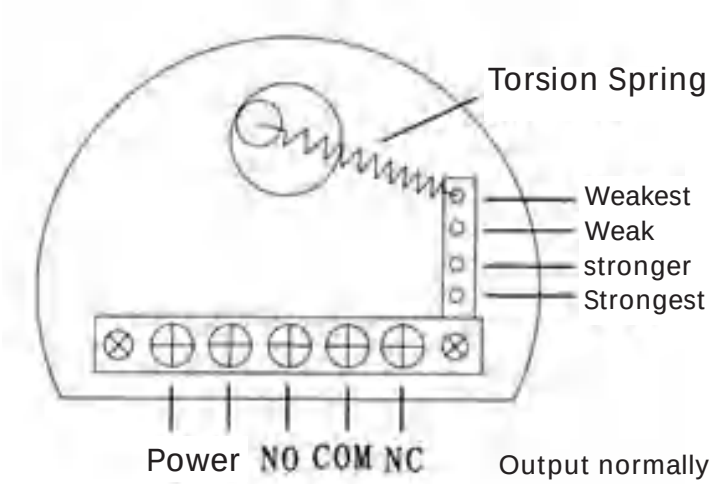
Remarks: Blade form



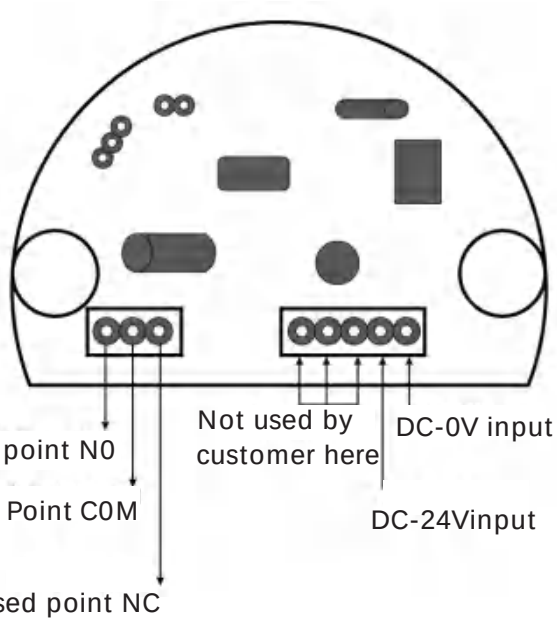
① Shell ② Fixing nut ③ Process connection ④ Lock nut ⑤ Main shaft ⑥ Blade

Roof Resistance Wiring Diagram

Blocking 220VAC Wiring Diagram

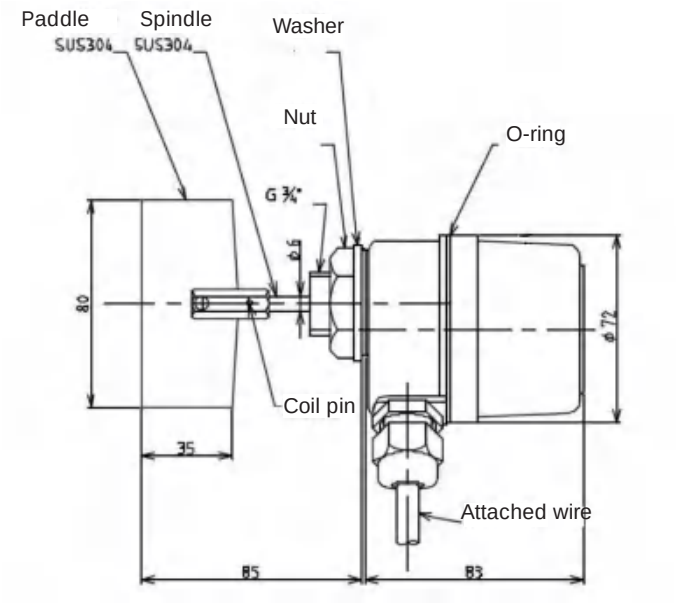


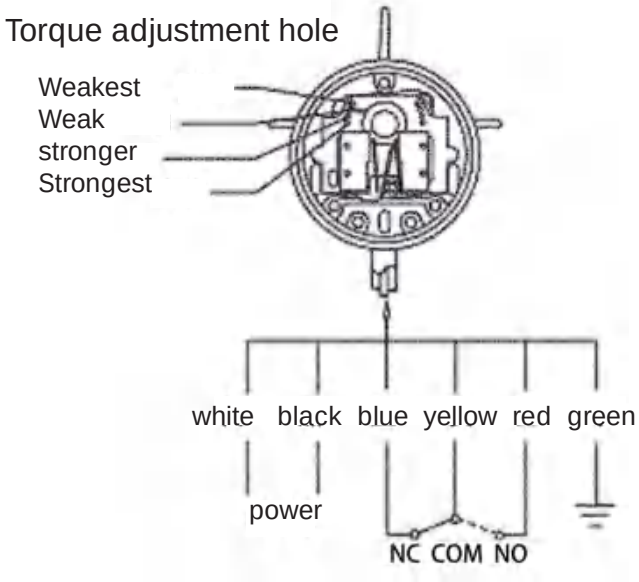
Resistance to 24VDC wiring diagram



NO：normally open　NC：normal close　COM：common port

small resistance to spin level switch wiring diagram:





1. black, white - power
2. green - ground
3. yellow - common line (COM), blue - normally closed (NC), red - normally open (NO)

Torque adjustment

1. The user can adjust the torque according to the specific gravity of the measured material. When the specific gravity of the object to be measured is large, the spring torque can be adjusted to the strongest position, at this time the sensitivity of the blade is poor; the smaller the specific gravity of the object to be measured, the spring can be adjusted to the weaker, then the sensitivity of the blade is better.
2. Specific method: open the junction box, the torsion spring near the porous end out, according to the need to insert the corresponding hole (near the terminal block of the weakest hole torque). Pay attention to the torque of the torsion spring in the process of use, please do not replace it arbitrarily, so as not to cause malfunction.

Installation Precautions

1. When installing horizontally, it is recommended to install the switch at an angle of 15℃～20℃ horizontally to minimize the impact of the material.
2. The entrance of the terminal box must be facing downward and the cable fixing nut must be locked.
3. Make sure that the voltage is correct at the time of power supply.
4. The load of the line to be controlled must be matched with the switch contact capacity.
5. Avoid bridge breakers or vibration motors near the installed products.
6. Avoid installing the switch close to the feed opening to minimize damage to the blades and malfunctioning of the lower material; if the switch must be installed close to the feed opening, install a 2mm wide protective baffle plate 200mm above the switch.

7. When installing each product, according to its model, choose horizontal and vertical installation.
8. When the adjustable shaft length switch is disassembled and installed on site, when the universal joint is connected to the drive shaft, the locking nut must be coated with oxygen-deficient adhesive and then locked with a wrench.
9. On-site installation and maintenance must comply with the warning "open the cover after disconnecting the power supply".
10. The installation site does not exist on the aluminum alloy corrosive effect of toxic gases.
11. The maximum temperature of the measured medium should not exceed the temperature indicated in the product label.
12. Do not strike the blade and drive shaft directly during product installation.

Common Troubleshooting and Troubleshooting

NO	Troubleshooting	analysis of causes	exclusion method
1	When the material is conveyed, the blade is still driven	The blade size does not consistent with the material weight	Rethe blade size
2	Blade deformation or drive shaft deformation and bending	The material impact force is too large	Take appropriate protective measures
3	The leaves do not turn	1. The power supply is not well connected	Check the line to connect the line
		2. The motor is burned	Contact us to replace the motor

Routine maintenance

1. Check whether the drive shaft and blades are bent and deformed or damaged.
2. Check whether the connection between drive shaft and blade is firm.
3. Regularly remove materials and debris on the blades and drive shaft.

Unpacking and checking

1. The package should be intact.
2. If you find any damage or loose parts of the product when unpacking, please notify us in time.
3. Contents of packing:
a) 1 set of the product
b) 1 copy of instruction manual
c) Certificate of Conformity