SPR400 Series Rotary Paddle Level Switch

MAIN FEATURES

- Has a good shaft sleeve seal design, which eliminates the phenomenon of fine powder jamming, making the measurement more reliable
- Rugged enclosure for any environment in the wild
- Imported instrument motor, long life and reliable action
- A variety of customized products are available, and the selection is no longer difficult
- Four torque adjustment gears, suitable for most specific gravity materials

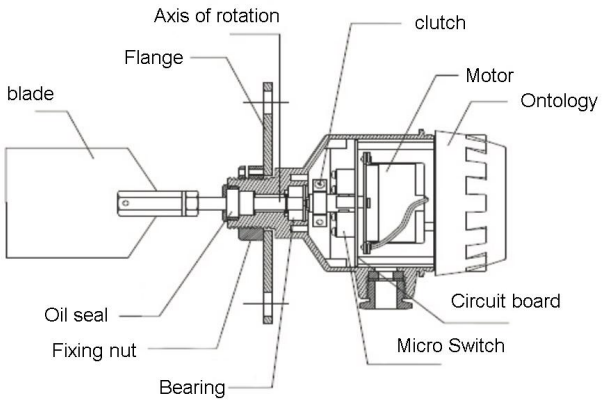
WORKING PRINCIPLE

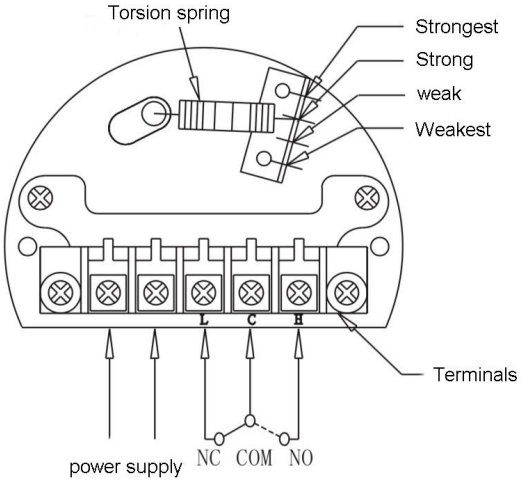
The resistance-type material level switch is equipped with a meter motor in a junction box, which uses a clutch device to connect a transmission shaft with a blade at the other end. When the material is not in contact with the material, the blade and the motor keep rotating coaxially along the transmission shaft. When the blade is in contact with the material and the shaft is blocked, the motor stops rotating and an alarm signal is issued.

APPLICATION

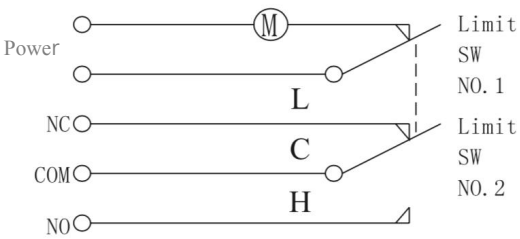
Due to its solid structure, it is very suitable for the measurement of powdery and granular materials such as cement, gravel, grain, feed, and pharmaceuticals.

OUTLINE STRUCTURE





CONTROL CIRCUIT SCHEMATIC



1. When the motor is running, there is no resistance on the blade. COM-NC is connected. When the motor stops and the blade is on resistance, COM-NC is disconnected, and COM-NO is connected.
2. When the resistance on the blade disappears, it returns to the connection between COM and NC, and the motor restarts.
Running.
3. Torque adjustment is used to adjust the torque output from the rotating shaft. When the specific gravity of the measured object is large, the torque can be adjusted to the strongest position. At this moment, the rotating shaft blade has a large torque and relatively low sensitivity. Otherwise the sensitivity is stronger.
Torque adjustment is generally not recommended for customers.

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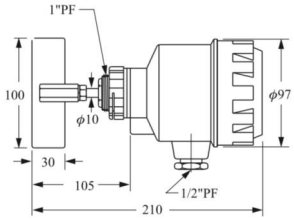
SPECIFICATION & DRAWING

Thread Standard

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
- Speed: 1R.P.M
- Torque: 0.5 ~ 1.0KG-cm
- Process connection: JIS65A 5K flange, 1 "PF
- Working temperature: -10 ~ 70°C
- Junction Box: Aluminum / IP65
- Inlet: 1/2 "PF
- Applicable specific gravity: 0.5



Adjustable shaft length

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
- Speed: 1R.P.M
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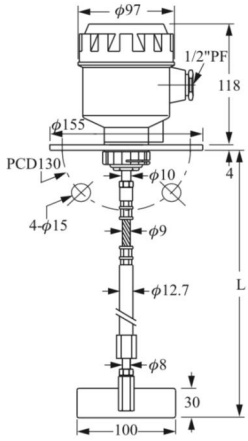
- Adjustable range: 450 ～ 650mm, 650 ~ 1000mm, 750 ~ 1200mm



Flange standard

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
- Speed: 1R.P.M
- Torque: 0.5 ~ 1.0KG-cm
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- Working temperature: -10 ~ 70°C
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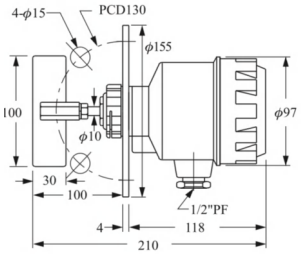
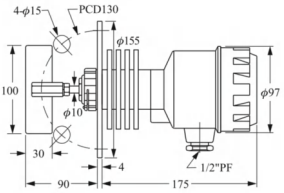
- Inlet: 1/2 "PF
- Applicable specific gravity: 0.5



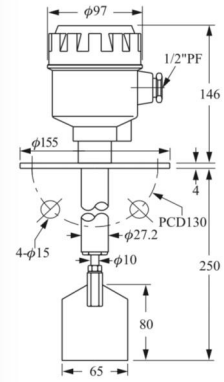
High temperature type

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
- Speed: 1R.P.M
- Torque: 0.5 ~ 1.0KG-cm
- Process connection: JIS65A 5K flange, 1 "PF
- Working temperature: -10 ~ 200°C
- Junction Box: Aluminum / IP65
- Inlet: 1/2 "PF
- Applicable specific gravity: 0.5



Shaft protection tube type

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
- Speed: 1R.P.M
- Torque: 0.5 ~ 1.0KG-cm
- Process connection: JIS65A 5K flange, 1 "PF
- Working temperature: -10 ~ 70°C
- Junction Box: Aluminum / IP65
- Inlet: 1/2 "PF
- Applicable specific gravity: 0.5



Shaft protection tube high temperature type

- Power supply: 220VAC, 110VAC, 24VDC, 24VAC, 50 / 60Hz
- Power consumption: 3W
- Output contact: SPDT / 3A / 250VAC
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- Torque: 0.5 ~ 1.0KG-cm
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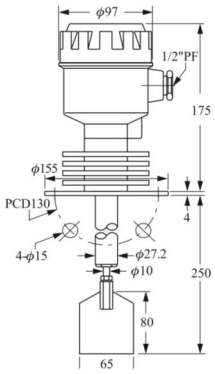

PRECAUTIONS

- Make sure blade size can pass through flange hole or tooth
- Hole Size
- Note that the specific gravity of the material must be greater than the applicable specific gravity of the product. Min. P = 0. 5
- The attachment location must not have a strong vibration source
- Low-level installation on the side, a protective baffle is installed on the upper side of the sensor about 300mm to prevent the impact of feeding
- Not specified by the customer. All flanges have a standard thickness of 4mm.

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ORDER GUIDE

Code:	A	–	B	–	C	–	D	–	E
SPR4	10	–	A	–	CR	–	100	–	B

Model	Code A
Thread Standard	10
Flange standard	11
Shaft protection tube type	20
Adjustable shaft length	30
High temperature type	40
Shaft protection tube high temperature type	41
Adjustable shaft length	46
Wire rope	60
Power supply	**Code B**
110VAC	A
220VAC	B
24VDC	C
24VAC	D
Process connection	**Code C**
Thread size	
C: 3/4" (20A). D:1"PT E: 1-1/2" PT F: 2"PT G: 2-1/2"PT S: G1	H: 3" (80A) I: 4" (100A) J:1"NPT K:1/2"NPT 3: 1-1/4" (32A) M: More customized
Flange specification	
M: DN25*PN1.0 N: DN50*PN1.0 O: DN65*PN1.0	

Insertion length	Code D
Xmm (X=specific)	Xmm
Blade specifications	**Code E**
A type: W65*H80	A
B type: W100*H30	B
C type: W100*H132	C
D type: W90*H30	D
X type: W100*H30	X
I type: W95*H35	I
J Folding type (opening size W200*H28)	J