

## Rotating Paddle Level Switch



### Principle & Operation :

Rotating Paddle Level switch consists electro-mechanical assembly with Geared A.C. Motor, which drives a connected paddle wheel through a special clutch mechanism. The absence of material allows motor to rotate the paddle uninterrupted. When the unit senses the material via the restricted rotation of the paddle, the reversing torque actuates the internal micro-switches fitted in the Housing and Alarms the unit, to give corresponding switching output signal.

### Silent Features :

- Simple but reliable switch for level Detection.
- Available in Rope extensions for long length.
- Motor operating the paddle is protected from overload by means of magnetic clutch.
- Specially designed PTFE seal to prevent ingress of dust particles and moisture into main enclosure.

## Technical Specifications :

|                       |   |
|-----------------------|---|
| Power Supply          | 24 VDC or 110 or 220VAC (50~60Hz)           |
| Power Consumption     | 4 VA, Motor: 1 RPM CW                       |
| O/P Contact Rating    | 5A, 250VAC (SPDT)                           |
| LED Indication        | 5 MM Green LED for Normal Running condition |
| Operating Temperature | -10 to 120°C                                |
| Operating Pressure    | Atmospheric                                 |
| Paddle Type           | L / J / Cizer/ 2 / 3 / 4 Vane               |
| Probe Length          | Std. 200 mm / Extra as per requirement.     |
| Process Conn. Type    | Standard Threaded 1 ½" BSP Male             |
| Process Conn. MOC     | SS 304 / SS316                              |

## Construction :

It Consist of a synchronous motor, housed in an enclosure along with a micro switch. The motor, when powered drives a paddle holding a shaft at a very low speed. Hence, the paddle rotates freely, when not in contact with material. However, the material coming in contact & holds the paddle resulting in stoppage of motion and generation of a reaction torque, which operates micro switch. When material goes away from the paddle is released causing the micro switches to reverse their action, which results in the re-starting of motor.

## Applications :

It is used in widely applications like Pallets, Powder, Cement, Ash, Material Handling, Argo, Rice, Husk, Food grains, Chemical industries. Dry bulk material applications, powders in hoppers, silo, bins. Compatible with many bulk solids, powders, pelletized and granular applications

# Model Identification : RPLS -

|  |  |  |  |  |  |
|--|--|--|--|--|--|
|  |  |  |  |  |  |
|--|--|--|--|--|--|

## 1. Length in mm

## 2. Construction Type

|                               |   |
|-------------------------------|---|
| Rigid                         | R |
| Flexible                      | F |
| Extended with Protection Pipe | E |

## 3. Paddle Type

|        |   |
|--------|---|
| L      | L |
| J      | J |
| Cizer  | C |
| 2 Vane | 2 |
| 3 Vane | 3 |
| 4 Vane | 4 |

## 4. Probe Material

|        |   |
|--------|---|
| SS304  | 4 |
| SS 316 | 6 |
| Other  | O |

## 5. Enclosure

|                 |   |
|-----------------|---|
| Cast Al WP IP66 | W |
| Other           | O |

## 6. Process Connection

|                        |   |
|------------------------|---|
| Threaded 1 ½" BSP Male | S |
| Other                  | O |

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