

Orbit - Stepmatic Rotary Paddle Level Switch

Version 2.1

Principle

A paddle is rotated slowly by a stepper motor. An encoder coupled to the paddle shaft produces electrical pulses during its rotation. The pulses are monitored by a microprocessor to ascertain its movement. Paddle rotation stops when the material covers it. The microprocessor signals the material presence and sends the result in the form of potential free contacts. When the material uncovers the paddle's blades, the motor resumes free operation, which is detected by the microprocessor. Thereafter, the output status is changed and the motor starts rotating smoothly again waiting for the level to come.



Approvals CE Marking, RoHS Compliance, Flameproof Enclosure (Gas Groups IIA, IIB)

Features

- Built-in universal power supply of 90-260 VAC and 24 VDC
- Direct stepper motor design, maintenance-free
- Need for gear boxes and clutches eliminated
- Variable torque control, one paddle for all applications
- Flap action to discard clinging material
- Selectable fail-safe operation
- Foldable paddle mechanism for ease of installation
- 2 potential free contacts with adjustable time delay
- Rope probe available for longer lengths

Technical Specifications

Housing:	Cast aluminium weatherproof, flameproof (Gas groups IIA, IIB)
Cable Glands:	2 X 13.5 PG Glands / 1/2" BSP / NPT
Temperature:	Standard Model: 0°C to 80°C High Temperature Model: up to 150°C
Power Consumption:	3 VA (approx.)
Operating Voltage:	90-265 VAC & 24 VDC (Universal Supply)
Output:	2 sets of potential-free contacts
Indication:	LED (Normal:Green,Alarm:Red)
Mounting:	Threaded: 1-1/2" BSP/NPT, Flanged: 50NB
Wetted Parts:	SS 316 / SS 304
Switching Delay:	3-5 sec. (Covered, Uncovered)
Checking Interval:	Up to 25 sec., set by DIP switch
Probe Length:	125 mm to 500 mm (Insertion), extensible up to 3500 mm for rope probe; Rod probe available

Parts

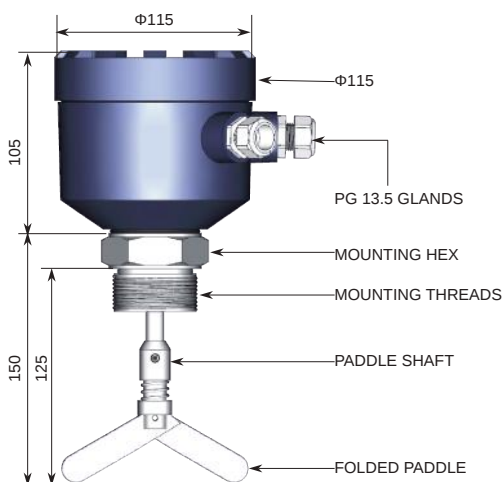


Figure 1: Parts of Orbit Paddle

Applications

- Chemical, PVC Powders
- Animal Feed Industry
- Food Processing
- Plastic Chips
- Cement
- Pharmaceuticals

Manufacturing Level Instruments & Speed Monitoring Systems

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