

The Pointek PLS 200 is a low-cost rotating paddle switch that detects full, empty, or demand conditions on bulk solids applications. The paddle switch technology provides superior performance on materials such as grain, feed, cement, plastic granulate, and wood chips. The paddle switch can handle bulk densities as low as 35 g/l (2.19 lb/ft³) with the optional hinged vane, or 100 g/l (6.25 lb/ft³) with the standard measuring vane.

A low revolution gearing motor drives a rotating measuring vane which senses the presence of material at the mounted level of the PLS 200. As material comes into contact with the rotating paddle, rotation stops, which actuates a relay contact closure. When the paddle is no longer covered by material, rotation resumes and the relay reverts to its normal condition.

The PLS 200 is a rugged design for use in harsh conditions within the solids industry. The sensitivity of the paddle can be adjusted for varying material properties like build-up on the vane.

The PLS 200 comes in a variety of configurations including compact, extended and cable extension. The PLS 200 is equipped with a standard vane which is effective in most applications, but can be configured with a hinged vane for increased sensitivity for light materials.



Product Features

- Proven paddle switch technology for bulk solids
- High integrity mechanical seal
- Switch selectable power supply
- Unique friction clutch mechanism
- Stainless steel 1¼" NPT or ½" BSP threaded connection
- Rotatable enclosure
- Hinged paddle optional for use with low density materials
- Simple installation through process connection

Technical Specifications

Power

- jumper selectable
- 115 Vac, ±15%, 50 to 60 Hz, 4VA OR
230 Vac, ±15%, 50 Hz, 6VA OR
24 Vdc, ±15%, 2.5W

Alarm Output

- pickup delay approx 1.3 seconds
- microswitch 5A at 250V ac, non inductive

Mechanical

- enclosure material: epoxy coated aluminum, NEMA 4 / IP65
- process connection: thread 1¼" NPT, ½" BSP
- conduit entry: 2x M20 OR
2 x ½" NPT
- process connection, measuring shaft and vane: stainless steel

Environmental

- location: indoor/outdoor
- ambient temperature: -20 to 60°C (-4 to 140°F)
- installation category: III

Process

- temperature: -20 to 80°C (-4 to 176°F)
- pressure: max. 0.5 bar (7 psi)
- sensitivity: adjustable via reset force of spring or geometry of measuring vane
- approximate minimum material density (standard measuring vane):
 - 100 g/l (6.25 lb/ft³) when paddle is covered by 10 cm (4") of material
 - 200 g/l (12.5 lb/ft³) when paddle is completely covered
- approximate minimum material density (hinged measuring vane):
 - 35 g/l (2.19 lb/ft³) when paddle is covered by 10 cm (4") of material
 - 70 g/l (4.69 lb/ft³) when paddle is completely covered

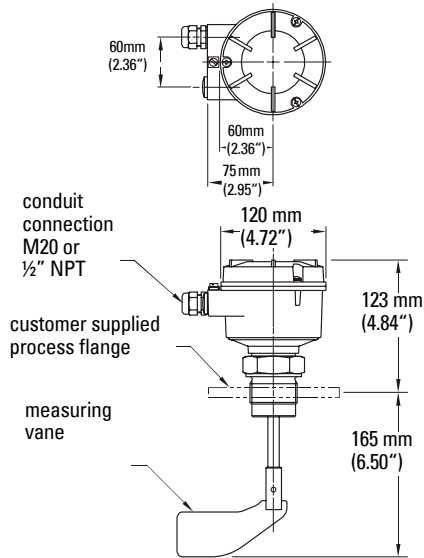
Approvals

- FM/cCSA Class II, Div. 1, Group E, F, G, Class III
- CSA_{US} Class II, Div. 2, Class III
- ATEX II 1/2 D (dust explosion)
- CE

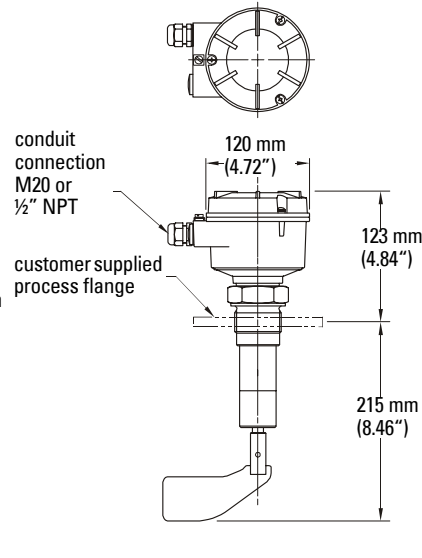
Pointek PLS 200

Dimensions

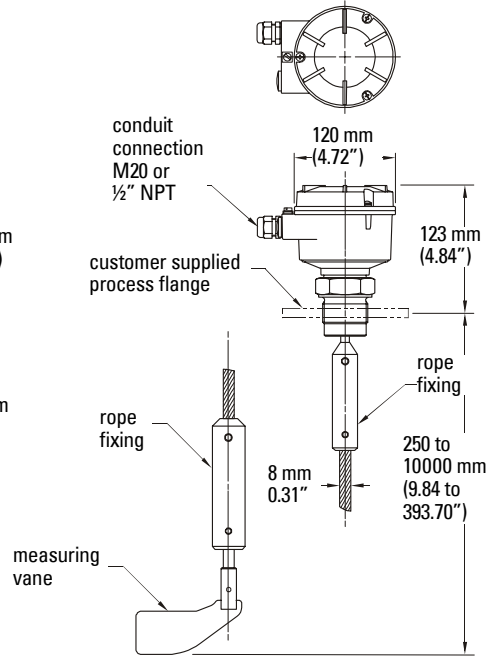
Compact



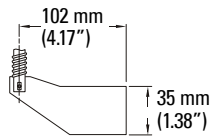
Extended



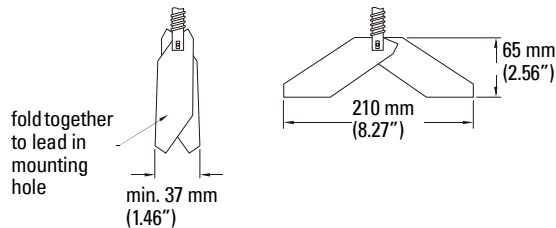
Cable Extension



Measuring Vanes



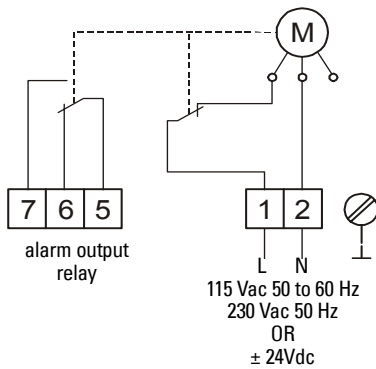
LEVEL MEASUREMENT POINT LEVEL



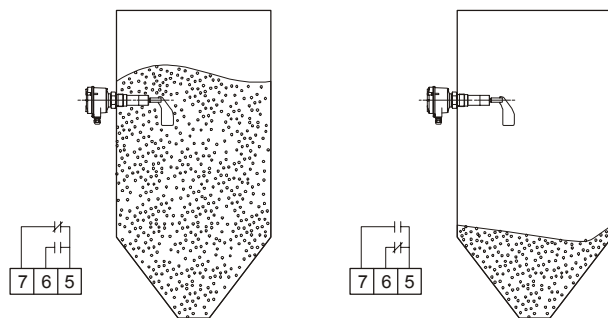
Notes

- 1) For heavy material, only top mounting of paddle switch is recommended.
- 2) Compact PLS 200 is recommended for side mounting on bins for low or intermediate material levels.

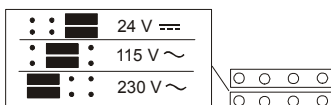
Wiring



Switching Logic



Voltage Selector



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