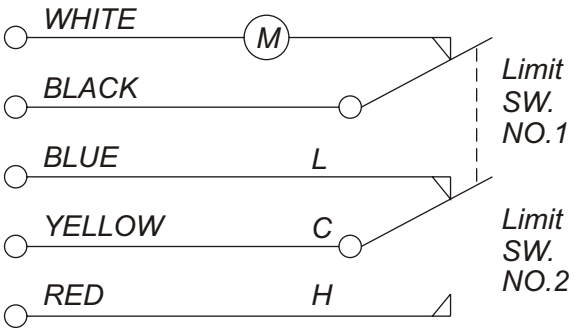
PADDLE SWITCH INSTRUCTIONS

WARNING
TO AVOID ELECTRIC SHOCK HAZARD DO NOT REMOVE HOUSING COVER BEFORE ISOLATING THE MAINS SUPPLY

OPERATING PRINCIPLE

The RP series operating principle is simple. Aunit is usually located through the bin wall at the top, middle or low level of a bin. During normal operation (no material present) a synchronous motor rotates the paddle at 1 RPM. When this paddle rotation is impeded by the material surrounding the paddle, the motor will stall and cause the microswitch to change state and indicate an alarm or control condition

With no material touching the paddle the synchronous motor is turning and the switch circuit is through terminals C and L
When material touches the paddle, the motor stops and the switch circuit is through C and H.
When the product falls away from the paddle, the motor starts turning again and the switch returns to C and L.
If the switch is to be used as a high alarm it is usual to wire the alarm circuit through terminals C and H.
If the switch is to be used as a low alarm it is usual to wire the alarm circuit through terminals C and L.

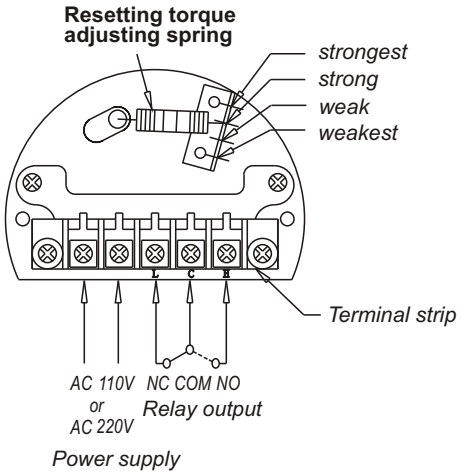


TORQUE ADJUSTING MECHANISM

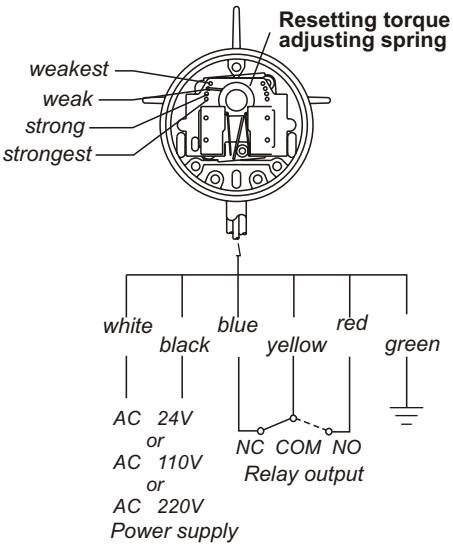
The switch leaves the factory set at the weakest torque setting. The weakest setting is suitable for all materials, but is the most sensitive, so it is recommended that the torque setting be adjusted for each application.
In general terms the weakest setting should be used for the lightest powders and the strongest setting for the heaviest.
Adjustment is simply a matter of unhooking the torque adjustment spring from its current position and replacing it in its new position

WIRING DIAGRAM

Series : RP10, 20, 30, 40, 60, 70



Series: RP80



INSTALLATION GUIDE

PLEASE NOTE

1. Please mount probe at correct height especially if it is a high level probe and the product peaks and troughs as shown in the diagram below.

2. Avoid mounting under a fill point but if necessary provide an inlet cover to protect the paddle switch as much as possible. The minimum recommended distance between probe and cover is 300mm.

3. Please take into consideration material flow pattern if the inlet is not mounted in the tank centre and allow for this in the mounting point of the switch.

4. Do not use the switch on applications with high vibrations.

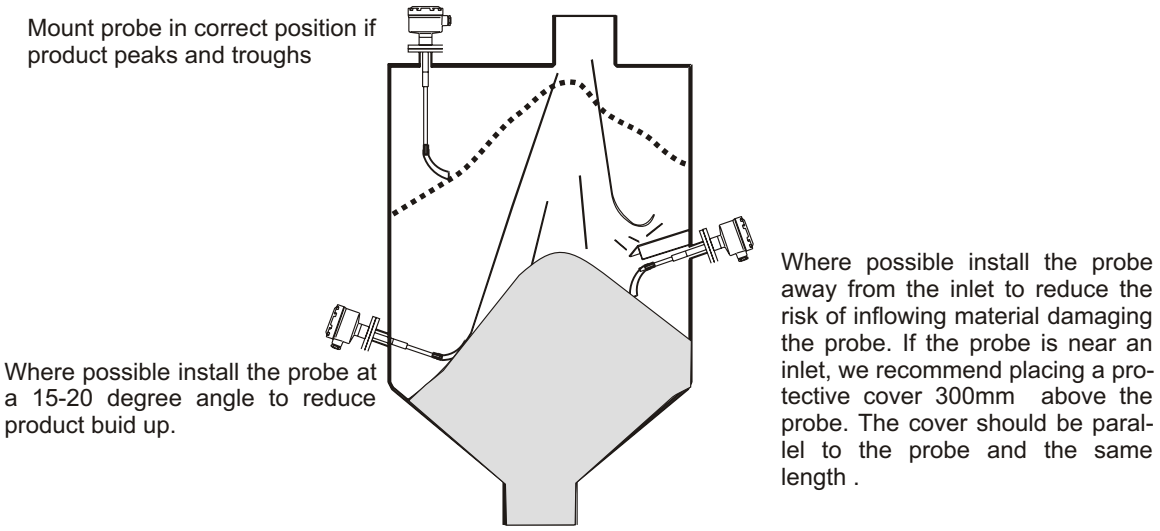
5. Always ensure the electrical entry is face down to reduce the chance of water ingress.

6. It is advisable incline the switches at an angle of 15-20 degrees for best performance and help reduce product build up on the paddle itself.

7. Do not use excessive force when mounting the switches with a threaded process connection or overtighten the bolts on a flange connection.

8. Do not install in an area of the bin where product may settle and cause a false reading during emptying.

9. Ensure paddle blade lock nuts are tight before installation.



FOR ADDITIONAL TECHNICAL SPECIFICATIONS AND DIFFERENT MOUNTING OPTIONS PLEASE REFER TO DATA SHEET HYC-PSC01

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