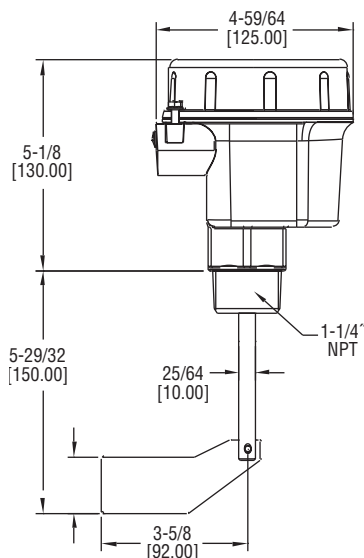


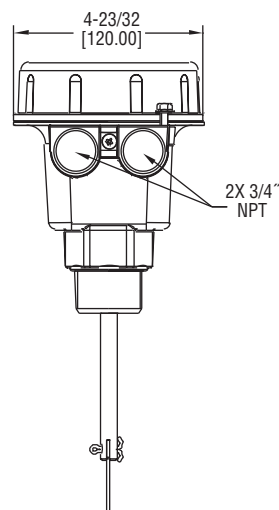


Model PLS2 Paddle Level Switch

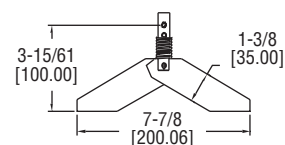
Specifications - Installation and Operating Instructions



PLS2-E-1-X



PLS2-PL2



PLS2-PL1

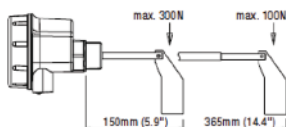
The Series PLS2 is an electromechanical level switch designed for level monitoring of bulk materials. The rotating measuring vane is driven by a brushless synchronous motor at one revolution per minute. As product builds up the paddle rotation is impeded and the resulting motor torque activates the output switch and stops the motor. A spring mechanism reactivates the motor and returns the switch to normal state when the material no longer impedes the paddle rotation. A torque adjusting mechanism eliminates the need for different sized paddles. The PLS2 is designed with the industry standard 1-1/4" male NPT connection and unit can be side or top mounted.

FEATURES

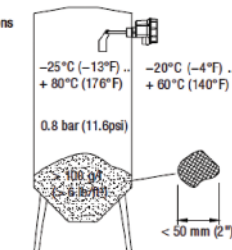
- 3 sensitivity settings
- Top or side mountable
- Brushless synchronous motor: Assures long term reliability and efficiency
- Motor shuts off when paddle stalls
- Screw cover: For easy access with no worries about losing bolts or screws

TECHNICAL DATA

Mechanical load



Process specifications



SPECIFICATIONS

Service: Dry powder or bulk materials compatible with wetted materials.

Wetted Materials:

- Paddle: 304 SS;
- Exposed shaft: 303 SS;
- Shaft seal: NBR;
- Process connection: Aluminum.

Temperature Limits:

- Process: -13 to 176°F (-25 to 80°C);
- Ambient: -4 to 140°F (-20 to 60°C).

Pressure Limit:

11.6 psi (0.8 bar).

Power Requirement:

Select by model number: 115 VAC, 230 VAC or 24 VDC.

Power Consumption:

AC version: 4 VA; DC version: 2.5 watt.

Enclosure:

Aluminum, powder coated.

Enclosure Rating:

NEMA 4 (IP66) and rated for Class II & III, Div. 1, Group E, F, G.

Switch Type:

SPDT micro switch.

Electrical Rating:

5 A @ 250 VAC, 3 A @ 30 VDC.

Electric Connections:

Screw terminals.

Conduit Connection:

3/4" female NPT.

Process Connection:

1-1/4" male NPT.

Mounting Orientation:

Side or top mounting.

Sensitivity:

Minimum material density of 6 lb/ft³ (96 kg/m³).

Permitted Mechanical Loading:

- Standard shaft: 67 lbf (300 N) max;
- Optional extension: 22 lbf (100 N) max.

Weight:

2.6 lb (1.2 kg).

Agency Approvals:

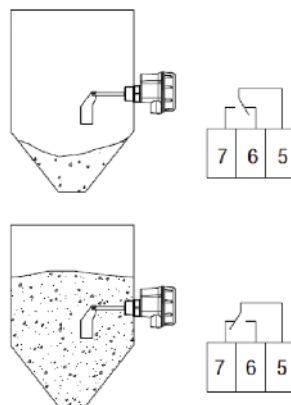
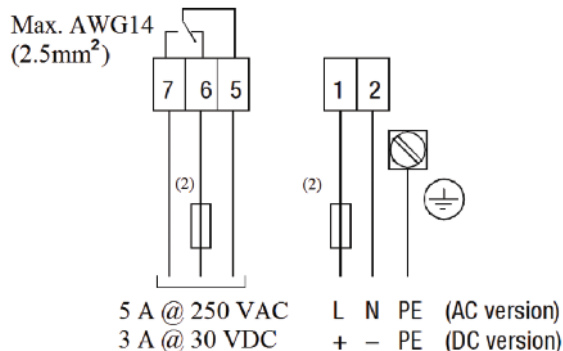
CE, FM.

INSTALLATION

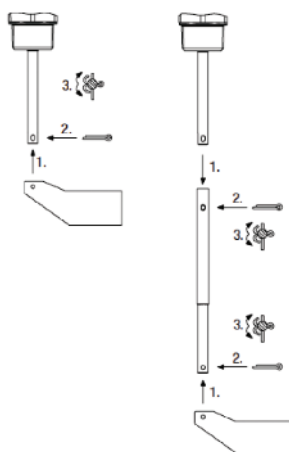
The PLS2 should be mounted on the side or top of the tank or bin. The conduit opening should be placed in a downward position, to protect from moisture entering the unit through the conduit. When selecting a mounting location, be sure the material can freely flow to and away from the shaft and paddle. The shaft and paddle should also be out of the direct flow of material as it fills the bin or tank. If it is necessary to mount in the flow stream, a protective baffle should be installed on the inner wall of the bin.

Wiring

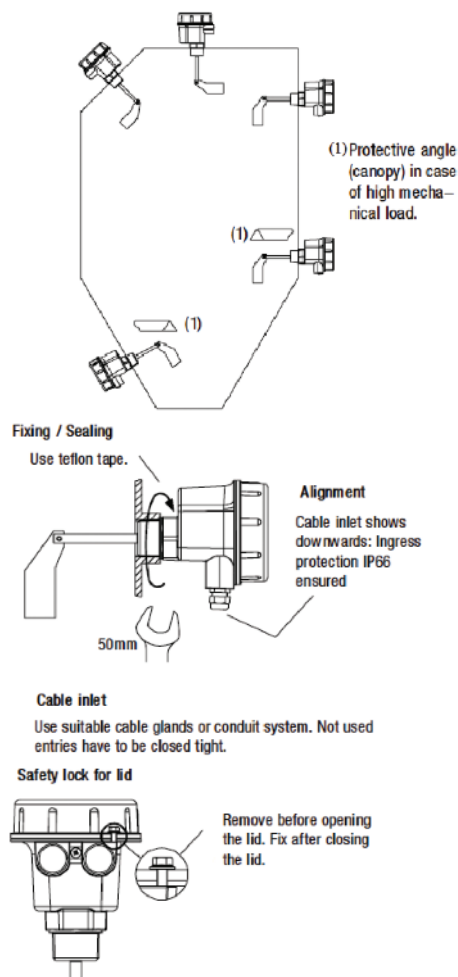
Make electrical connections per the wiring diagram for output switch options selected. Wire in accordance with local codes. For hazardous locations, a sealing fitting must be located within 18" of the control.



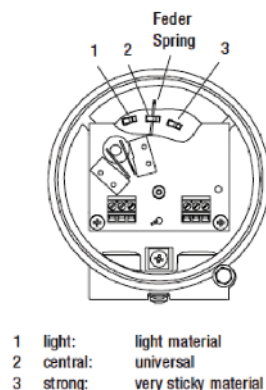
ASSEMBLY



MOUNTING PROCEDURE



ADJUSTMENT OF THE SPRING FORCE



MAINTENANCE/REPAIR

Upon final installation of the Series PLS2, no routine maintenance is required. The Series PLS2 is not field serviceable and should be returned if repair is needed. Field repair should not be attempted and may void warranty.

WARRANTY/RETURN

Refer to "Terms and Conditions of Sales" in our catalog and on our website. Contact customer service to receive a Return Goods Authorization number before shipping the product back for repair. Be sure to include a brief description of the problem plus any additional application notes.