Incorporated in the design of the PLS is a magnetic drive that is time proven by decades of use in our Mark Series valve position indicator product line. A 1 rpm synchronous motor rotates the paddle utilizing a magnetic drive. As product builds up the paddle is impeded from moving and the resulting motor torque activates the output switches to normal state when the product no longer impedes the paddle rotation.

Standard construction is weatherproof with explosion-proof optional, and the unit can be side or top mounted. The PLS is designed with the industry standard 1-1/4˝ male NPT connection and mounting flanges.

FEATURES

- **Magnetic drive** that isolates and completely seals the control head from the process and environment preventing material or dust from entering the control head.
- **Motor shuts-off** when paddle stalls increasing motor life, preventing motor burnout, and decreasing power usage.
- **Slip clutch design** enabled by the magnetic drive that prevents damage to motor and drive mechanism from sudden or excessive loading on the paddle.
- **Status indication light** in weatherproof models.
- **Screw cover** on the enclosure for easy access with no worries about losing bolts or screws.
- **Modular design** to allow field installation of any paddle, flanges, shaft extensions, or shaft guards.

Control Assemblies

<table>
<thead>
<tr>
<th>Control Assemblies</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PLS-W-S-1-0-0-0-0</td>
<td>Weatherproof construction, SPDT switch, 120 VAC power supply. Order paddles and flanges separately.</td>
<td>$222.00</td>
</tr>
<tr>
<td>PLS-W-S-1-1-0-0-0</td>
<td>Weatherproof construction, SPDT switch, 120 VAC power supply, includes PDL-3 paddle.</td>
<td>$249.00</td>
</tr>
<tr>
<td>PLS-W-S-1-2-CSH-0-0</td>
<td>Weatherproof construction, SPDT switch, 120 VAC power supply, includes PDL-1 paddle and FLG-CSH flange.</td>
<td>$272.00</td>
</tr>
</tbody>
</table>

Paddles (See top of page)

<table>
<thead>
<tr>
<th>Paddles (See top of page)</th>
<th>Price</th>
<th>Flanges</th>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>PDL-1</td>
<td>$27.00</td>
<td>FLG-CSH</td>
<td>Carbon Steel with Half Coupling</td>
<td>$24.25</td>
</tr>
<tr>
<td>PDL-2</td>
<td>25.75</td>
<td>FLG-CSF</td>
<td>Carbon Steel with Full Coupling</td>
<td>27.00</td>
</tr>
<tr>
<td>PDL-3</td>
<td>27.00</td>
<td>FLG-SSH</td>
<td>316 SS with Half Coupling</td>
<td>63.50</td>
</tr>
<tr>
<td>PDL-4</td>
<td>25.75</td>
<td>FLG-SSF</td>
<td>316 SS with Full Coupling</td>
<td>77.00</td>
</tr>
</tbody>
</table>

Contact the factory for pricing of shaft extensions, protective shields, and other options. More detailed information available in our Measurement & Control for Powder, Dust, and Bulk Materials Catalog.

SPECIFICATIONS

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

Sensitivity: Min material density of 5 lb/ft3 (80 kg/m3), max of 200 lb/ft3 (3200 kg/m3).

Wetted Materials:

- Paddles: 316 SS; Exposed shaft: 316 SS; Shaft seal: PTFE;
- Mounting boss: Aluminum; Flexible coupling: 316 SS;
- Mounting flanges: Carbon steel or 316 SS;
- Shaft extension and shaft guards: Galvanized steel or 316 SS.

Temperature Limits:

- Standard construction: Process: -40 to 300°F (-40 to 148.9°C);
- Ambient: -40 to 185°F (-40 to 85°C);
- High temperature option: Process: -40 to 500°F (-40 to 260°C);
- Ambient: -40 to 185°F (-40 to 85°C).

Pressure Limit: 30 psig (2.07 bar) max for .5 micron or larger material.

Power Requirement: Select by part number: 110 to 120 VAC, 230 VAC, 24 VAC, 48 VAC, 12 VDC, or 24 VDC.

Power Consumption: Weatherproof models: 5 watts; Explosion-proof models: 3 watts.

Enclosure: Aluminum, powder coated.

Enclosure Rating: Weatherproof (W, WH construction): NEMA 4X (IP66);
Explosion-proof (E, EH construction): NEMA 4X (IP66) and rated for Class I, Div. 1 & 2, Groups C & D, Div. 1 & 2, Groups E, F, & G.

Switch Type: SPDT or optional DPDT snap switch.

Electrical Rating: 15A @ 120/230 VAC, 5A @ 24 VDC.

Electric Connections: Screw terminals.

Conduit Connection: 3/4" female NPT.


Weight: Control head only: 4 lb (1.81 kg).

Indication Light: Red LED that activates when switch is made or when switch is not made with RL option (Not available on explosion-proof models).

Agency Approvals: cUL approved as an auxiliary device or as an auxiliary device for hazardous locations.