Level Devices

We offer Rotary Level Indicators, Radio Frequency Level Indicators, and Turning Fork Level Sensors. For more information please contact your Schenck Process Aftermarket Sales Representative: 816-891-9300.

Rotary Level Indicators
Roto-Bin-Dicator®

The Roto-Bin-Dicator® Rotary Level Indicator eliminates damage and waste from bin overflow, empty bins, clogged conveyors, and choked elevators. Applications include chemical, food, mining, plastics, ceramics, pulp and paper, grain, foundry, and cement.

Versatile Rotary Level Indicator controls are recommended for the majority of dry material level control applications.

Easy to install
- No calibration required
- Simple mechanical device
- Test in place with magnetic key FOB
- SuperSafe versions

Flexible
- Wide variety of paddle options
- Custom process fittings available
- Custom shaft extensions
- Mount in any orientation

Unique Design
- Few moving parts
- Motor heats cavity, reducing moisture build-up
- High and low level fail-safe protection
Specifications

Power Requirements  
24/120/240 VAC, 24 VDC

Fail-Safe Operation  
Low and high depending on model

Process Temperature
-40º to 200º F (-40º to 194º C) standard  
Higher temps achieved with optional extension

Switch or Relay Output  
SPDT up to 10 amps dependent on version

Approvals
Approvals: UL (US and Canada) Ordinary & Hazardous Location; CE

Paddle Matrix

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Dimensions</th>
<th>Insertion Length</th>
<th>Application Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-370</td>
<td>4-Vane</td>
<td>Stainless steel</td>
<td>1.5” x 5”</td>
<td>3.75”</td>
<td>Med. weight material - max. particle size of 3/4”</td>
</tr>
<tr>
<td>H-371</td>
<td>4-Vane</td>
<td>Stainless steel</td>
<td>2” x 7”</td>
<td>3.75”</td>
<td>Light weight material - max. particle size 3/4”</td>
</tr>
<tr>
<td>H-373</td>
<td>Multiflex</td>
<td>Neoprene</td>
<td>1.5” x 24”</td>
<td>26.5”</td>
<td>Heavy large particle size</td>
</tr>
<tr>
<td>H-374</td>
<td>Multiflex</td>
<td>Stainless steel</td>
<td>1.5” x 17”</td>
<td>22”</td>
<td>Heavy large particle size; for higher temps.</td>
</tr>
</tbody>
</table>
| H-379   | Curved banana         | Stainless steel | 4.56” x 75” | 8.25”            | Low to med. weight materials  
Max. particle size 1/4”                                        |
| H-372A  | 1-Vane with 45° cut   | Stainless steel | 1” x 2.88”  | 3.75”            | Typically side mount, heavy material  
Max. particle size 1”                                             |
| H-380   | 2-Vance collapsible   | Stainless steel | Closed 5” x 8.75”  | 5.94”            | Low to med. weight materials, highly aerated  
Max. particle size 1/4”                                           |
The Roto-Bin-Dicator® PRO paddle wheel is unique in the bulk solids industry with its ability to detect faults while the paddle is in material. It is a true fail-safe device that is able to perform complete self-diagnostics in and out of material, compared to other devices that only provide diagnostics when the paddle is out of material.

**Self-Diagnostics**
- Supply voltage fault
- Motor not connected
- Motor failure
- Gear train failure
- Electronics temperature range
- Electronics fault

**Flexible Design**
- Wide variety of paddle options
- Custom process fittings available
- Custom shaft extensions
- Mount in any orientation
- Red and green lights indicate power an alarm status
**Specifications**

<table>
<thead>
<tr>
<th>Power Requirements</th>
<th>120 - 240 VAC 50/60 Hz or 24 - 48 VDC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Power Consumption</td>
<td>3 watts (1.8 watts in Pause Mode)</td>
</tr>
<tr>
<td>Process Temperature</td>
<td>-20º to 302º F (-29º to 150º C) standard Higher temps achieved with optional extension</td>
</tr>
<tr>
<td>Switch or Relay Output</td>
<td>Main Relay 8 A DPDT @ 240 VAC or 30 VDC (resistive); Auxiliary Relay: 0.46 A SPDT @ 150 VAC or 1 A @ 30 VDC</td>
</tr>
<tr>
<td>Approvals</td>
<td>Approvals: UL (US and Canada) Ordinary &amp; Hazardous Location; CE</td>
</tr>
</tbody>
</table>

**Paddle Matrix**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Material</th>
<th>Dimensions</th>
<th>Insertion Length</th>
<th>Application Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td>H-370</td>
<td>4-Vane</td>
<td>Stainless steel</td>
<td>1.5” x 5”</td>
<td>3.75”</td>
<td>Med. weight material - max. particle size of 3/4”</td>
</tr>
<tr>
<td>H-371</td>
<td>4-Vane</td>
<td>Stainless steel</td>
<td>2” x 7”</td>
<td>3.75”</td>
<td>Light weight material - max. particle size 3/4”</td>
</tr>
<tr>
<td>H-373</td>
<td>Multiflex</td>
<td>Neoprene</td>
<td>1.5” x 24”</td>
<td>26.5”</td>
<td>Heavy large particle size</td>
</tr>
<tr>
<td>H-374</td>
<td>Multiflex</td>
<td>Stainless steel</td>
<td>1.5” x 17”</td>
<td>22”</td>
<td>Heavy large particle size; for higher temps.</td>
</tr>
<tr>
<td>H-379</td>
<td>Curved banana</td>
<td>Stainless steel</td>
<td>4.56” x 75”</td>
<td>8.25”</td>
<td>Low to med. weight materials Max. particle size 1/4”</td>
</tr>
<tr>
<td>H-372A</td>
<td>1-Vane with 45º cut</td>
<td>Stainless steel</td>
<td>1” x 2.88”</td>
<td>3.75”</td>
<td>Typically side mount, heavy material Max. particle size 1”</td>
</tr>
<tr>
<td>H-380</td>
<td>2-Vance collapsible</td>
<td>Stainless steel</td>
<td>Closed 5” x 8.75”</td>
<td>5.94”</td>
<td>Low to med. weight materials, highly aerated Max. particle size 1/4”</td>
</tr>
</tbody>
</table>

*NOTE:* For horizontal mounting, conduit openings must face downwards and include drip loop.
Capacitance Level Sensors
VRF® II Series

Offering the complete line of capacitance level sensors, featuring 1-step calibration and Test-In-Place, saves you time and money. Quality, wave-soldered, solid-state electronics and high pressure injection molded probes with PRO-GUARD® are just two unique manufacturing features that make this level sensor reliable.

Sensitivity and Control
- Adjustable sensitivity to detect a wide range of materials from grains to plastics
- Adjustable time delay
- Ignores non-conductive build-up on the probe
- Field selectable fail-safe

Flexible Design
- Universal Power: connect to AC or DC without adjustment
- Customized process fittings available
- Wide variety of probe options including cable probe and probe extensions
- Remote electronics, up to 100 ft (30 m)

Ease of Use
- Test in place and calibrate with magnetic key FOB
- Automatic calibration – no potentiometers involved
Specifications

**Power Requirements**
Universal 110-240 VAC, 50/60 Hz; 24-48 VDC

**Temperature**
- Electronics: -40º to 158º F (-40º to 70º C)
- Probe: -40º to 993º F (-40º to 534º C) depending on probe

  *Lagging and/or remote electronics available for higher temperature applications

**Output**
- DPDT 8A resistive @ 240 VAC or 30 VDC
- Auxiliary relay available

**Pressure Rating**
Up to 150 psi (10 bar)

**Sensitivity**
Materials with dielectric constants down to 1.2

**Remote Electronics Distance**
Up to 100 ft (30 m)

**Approvals**
- Approvals: UL (US and Canada) Ordinary & Hazardous Location; CE

*NOTE:* 1—ONLY UNITS WITH ADVANCED ELECTRONICS WILL HAVE LIGHTS.
2—FOR HORIZONTAL MOUNTING, CONDUIT OPENINGS MUST FACE DOWNWARDS AND INCLUDE DRIPLUPE.
Turning Fork Level Sensors
Pulse Point™

The Pulse Point™ is a tuning fork point level sensor that may be used to detect high and low levels in bins, tanks, and silos. These sensors can be used to detect the presence or absence of granular, solid, or powder materials with densities as low as 2 lbs./cu.ft. It requires no calibration and offers higher reliability than other types of sensing technology. This sensor does not depend on material electrical properties – only the material’s physical presence at the tuning fork.

Flexible Design
- Universal Power: connect to AC or DC without adjustment
- Customized process fittings available
- Extended assemblies to 15 feet
- Remote electronics available

Versatile
- Liquid/solid interface for detection of solids in liquid
- Adjustable time delay
- Adjustable sensitivity settings detect material densities as low as 0.5 lbs/ft³ (8 kg/m³)
- Build-up detection

Ease of Use
- Test in place with magnetic key FOB
- No calibration required
Specifications

**Power Requirements**
Universal 110-240 VAC 50/60 Hz; 24-48 VDC

**Temperature**
Electronics: -40° to 158° F (-40° to 70° C)
Fork: -55° to 302° F (-48° to 150° C) depending on fork
*Lagging and/or remote electronics available for higher temperature applications*

**Output**
DPDT 8A resistive @ 277 VAC or 30 VDC
Auxiliary relay available

**Pressure Rating**
Up to 150 psi (10 bar)

**Sensitivity**
Adjustable; bulk density down to 0.5 lbs/ft³ (8 kg/m³)

**Maximum Particle Size**
3/8 in (9.5 mm)

**Remote Electronics Distance**
Up to 100 ft (30 m)

**Approvals**
Approvals: UL (US and Canada) Ordinary & Hazardous Location; CE