

MODEL BL-50

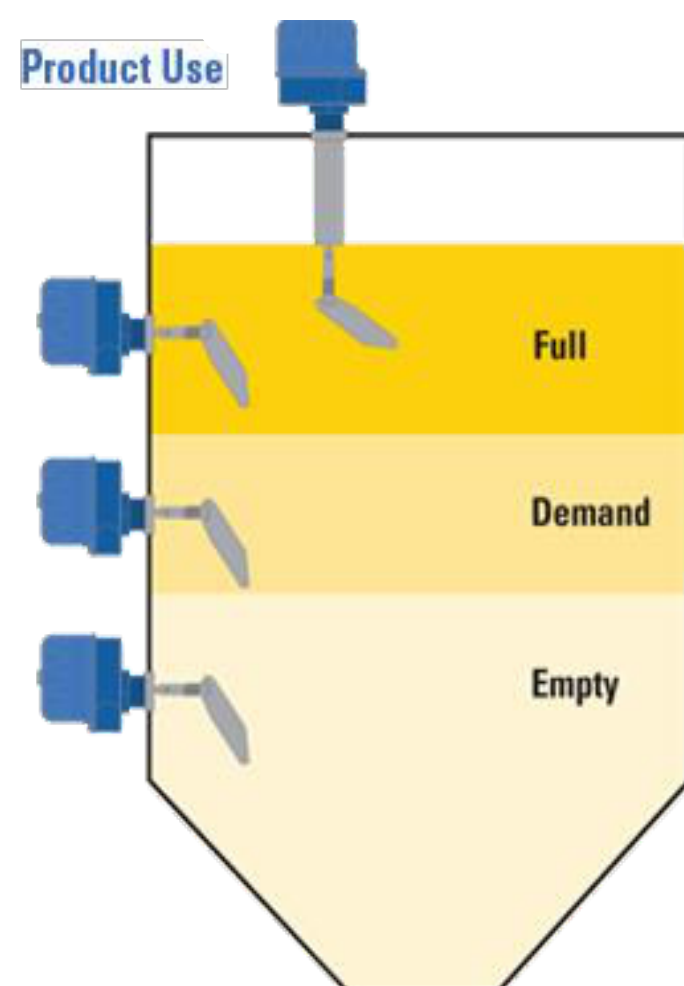
Rotary Paddle Bin Level Indicator

Our industry standard workhorse level detection sensor for powders and bulk solids – high reliability, low maintenance, and high value.



ABOUT

These rugged and reliable rotary paddle bin level indicators are the most universal sensor for detecting the presence and absence of bulk solids ranging in density from 5 to over 100 pounds per cubic foot (80 to 1600 kilograms per cubic meter). Model BL-50 units are equipped with fail-safe relay output, high intensity LED's, industry-standard 1-1/4" process connection, two conduit entrances, and food grade materials of construction. All units are available with folding or fixed paddles for easy installation from outside the bin and can be top or side mounted.



- ✓ SUPER BRIGHT LED's locally indicate Normal / Alarm status
- ✓ Rugged aluminum enclosure with powder coat finish (FDA Compliant)
- ✓ Improved moisture seal with a bolt-on cap
- ✓ Selectable High/Low fail-safe output on power failure
- ✓ Three bearing shaft assembly increases reliability and life
- ✓ Internal bi-directional torque limiter protects motor
- ✓ Automatic motor shut-off
- ✓ DPDT relay output
- ✓ Removable wiring terminals
- ✓ Interchangeable with other brands accessories
- ✓ Adjustable Sensitivity (If needed)
- ✓ Dual conduit entrances



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Technical Data

Housing	Die-cast aluminum, FDA compliant powder coat, NEMA Type 4X, IP65
Process Temp	Up to 300° F (149° C)
Ambient Temp	-40° F to +158° F (-40° C to +70° C)
Sensitivity	Low Level ≥ 5lbs/ft³, High Level ≥ 10lbs/ft³, Adjustable setting
Motor Voltage	115VAC
Output	DPDTRelay, 8A @ 250VAC
Process Connection	1-1/4" NPT powder coated
Bearings	Three (3) sealed bearings
Certifications	CEmark, SGS Mark UL61010-1, CSA C22.2

Ordering Information

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Power Supply 1 – 115VAC	Approvals 1- Ordinary Location	Shaft Coupling 1- None 2- Standard Coupling 3- Optional Coupling
Process Connection 1- 1-1/4" NPT aluminum	Temperature 1- Standard	

*Please see Model RHX for Hazardous Location needs.

Principal of Operation

For several decades rotary paddle technology has been used as a method for detecting the presence and absence of bulk solid materials.

A robust synchronous motor drives a stainless-steel output shaft at approximately 2 RPM. The paddle is attached to the shaft and rotates freely in the absence of material within the bin.

Material presence surrounding the paddle in the bin will impede its rotation and cause the state of the built-in relay contacts to change, indicating material presence. The built-in LED's will change to indicate the status of the alarm condition.

Application and Use

High (full), low (empty), intermediate (demand) level indication, and plugged chute detection, are common applications within a wide variety of industries. Prevention of bin overfilling and material outage conditions are typical uses of these devices. The Model BL-50 rotary paddle bin level indicators can be used to detect materials with density from 5lbs/ft³ (80kg/m³) for low and intermediate level control applications and from 10lbs/ft³ (160kg/m³) for high level indication.

Example materials include plastic pellet, food stuffs, feed and their ingredients, grains, cement, aggregate materials, nuts, flour, resins, sand, coal, chemicals, limestone, wood, sawdust and many more.

Model BL-50 Rotary Paddle Accessories

- Insertable folding 1- and 2-vane paddles
- Std. 5" Dia. & Large 7" Dia. threaded tri-vane paddles
- Insertable threaded Banana and 1-vane heavy duty paddles
- 2 and 4-vane heavy duty threaded paddles
- Extension shafts and shaft guards
- Mounting plate kits



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