

DEPENDABLE LEVEL CONTROL OF FREE-FLOWING BULK SOLIDS

Sterling offers Bindicator and Monitor rotary level sensors, as well as Bindicator radio frequency sensors and silo inventory measuring heads. Control consoles are also available. Sensors are available for single point and continuous level sensing applications for most bulk solid materials. Standard temperature and high temperature models are available to provide solutions for almost any application. Sterling also has available a series of level sensing control indication panels to compliment your level sensing requirements. These panels provide visual and audible indication of level status.



Features

Rotary Level Sensors

- Cast aluminum housing, stainless steel shaft and paddle
- 115/1/60 VAC motor and two SPDT auxiliary switches
- 18 extension (top-mount units only)
- NEMA 4/5 enclosure
- Flex coupling and coupler (top-mount units only)

Radio Frequency Level Sensors

- Cast aluminum housing
- Single probe with 3/4" threaded connector
- 115/1/60 VAC operation with DPDT output relay
- Electronic push button calibration
- NEMA 4/5 enclosure
- Electronics are remote-mounted with 20 feet of cable

Silo Inventory Measuring Head

- Measuring span up to 100 feet
- Injection-molded Minlon frame and polyethylene cover with 3" NPT mounting hub
- Plastic sensing weight
- 3" NPT aluminum pipe flanges
- 3" x 12 long (approx. 76 mm x 305 mm) aluminum standpipe
- Count output in 0.39" (1 cm) increments
- 115/1/50-60 VAC electrical wiring connection
- 3/4" connection

Options

Level Indicators:

- 230/1/60 voltage (rotary level sensors and RF 12000 only)
- High temperature, 400°F package: (not available on Bindicator models or radio frequency level sensors)
- Control console with 2, 4, or 10 control points

Measuring Head:

- NEMA 3R or NEMA 7 enclosures
- NEMA 1 or NEMA 7 control console
- Internal heater assembly for control console
- Air purge for control console
- Sounding weights for control console
- 230/1/60

MLI SERIES

Material Level Indicators

ROTARY LEVEL SENSORS

| Brand | Model number | Mounting | Diameter, in. | Height, in. | Ship. weight, lbs. |
|------------|--------------|----------|---------------|-------------|--------------------|
| Bindicator | 3108AS | Side | 8 | 6 | 8 |
| Bindicator | 3108AT | Top | 8 | 6 | 10 |
| Monitor | 3108BS | Side | 8 | 6 | 8 |
| Monitor | 3108BT | Top | 8 | 6 | 10 |

Use with control consoles listed below or railcar unloading system for high level cutoff.

CONTROL CONSOLES

Control consoles are available for use with rotary or radio frequency level sensors. The multiple-point console features high and low indicating lights, audible alarm, NEMA 1 enclosure, and control contacts rated at 1 amp at 115/1/50-60 VAC. Consult factory for lead time.

| Model Number | Type | Total Control Points | Indicating Lights on Graphic* |
|--------------|---------------------|----------------------|-------------------------------|
| RLC2 | Relay-based control | 2 | 1 high; 1 low |
| RLC4 | PLC-based control | 4 | 2 high; 2 low |
| RLC10 | PLC-based control | 10 | 5 high; 5 low |

* Consult factory for other configurations

SILO INVENTORY MEASURING HEADS

The Bindicator silo inventory measuring head comes with 100 feet of 1/16" braided nylon cable. Cable length should be inside tank height minus 2 feet.

Model IMH-GP features a NEMA 3R enclosure. Model IMH-EP features a NEMA 7 enclosure, cast aluminum housing, class I, division I, groups C & D and class II, division I, groups E, F, & G stainless steel plumb bob weight, auxiliary cable wiper.

CONTROL CONSOLES

The silo inventory measuring head is available with a solid state control console, which features table mounting, subtractive count, manual reset, and readout capability in increments of 1/10 ft. or decimeters. The control console controls up to 10 silo measuring heads, and is available with 115/1/50-60 voltage and either a NEMA1 (IMC-GP/10) or NEMA7 (IMC-EP/10) enclosure.

A 10 watt, 115/1/50-60 internal heater assembly is available, and is required for below-freezing temperatures. Air purge is available for high-temperature and/or dusty environments, with 1/4" NPT on mechanical side. Sounding weights are available in standard plastic with spike, 316 stainless steel bob weight, or 316 stainless steel float.

REMOTE DISPLAY CONTROL CONSOLE

The silo inventory measuring head is available with an optional remote NEMA 4x display with keypad.

Control panel includes:

- 115/1/60 (230V optional)
- 4 line x 20 character display
- Programmable sensor names and ranges
- Enable/disable network addresses
- RS-485 (MODBUS) communication
- Up to 99 sensors connected to a single display
- Optional modem
- Optional PC software