

# Affordable High Level Detection

The BM-TSM is a patented, mercury-free tilt switch used for high level detection of powders and bulk solids and features C/US Class II, Division 1, Groups E, F and G and ATEX Zone 21 hazardous location approvals. The BM-TSM tilt switch features a non-powered, pendulum-type design for fixed

mounting on the outside on the top of the bin. It operates using a unique method to sense the probe tilt angle which activates a contact closure that can be used for a direct input to a control system, or activate an external alarm. The switch is activated when material rises and tilts the switching mechanism 15 degrees.

#### **Custom-Built for Each Bin**

The shaft of the tilt switch is custom-made in BinMaster's Lincoln, Nebraska factory in lengths from one foot up to eight feet in length. You specify the length of the shaft based upon the distance from the top of the bin an alert should be activated. The BM-TSM is available with either a paddle or sphere mounted at the end of the shaft and can be used in materials with a bulk density of at least 15 pounds per cubic foot.

### **BM-TSM Fits Many Applications**

- High level detection of powders and bulk solids in bins, tanks and silos
- Mounts on top of the bin in a standard 1-1/4" process connection
- For materials with a bulk density of at least 15 lb./cu. ft.
- · No electrical contact wires in the bin
- Use over conveyor belts to sense overloading
- · Alternative to other point level controls

## Mercury-Free Tilt Switch



# Simple, Rugged Design for Hassle-Free Operation

Unlike more costly, complex high level indicators, this unique tilt switch is affordable, easy to understand, simple to apply, and has a long product life. The BM-TSM can be used as an alternative to other top-mounted high level technologies and is suitable for a wide range of solid materials in most any industry. The simple, mechanical design is rugged and operates reliably in a wide range of temperatures and is tough enough to withstand the harshness of granules and lump solid materials. The protective boot protects the

tilt mechanism and ensures long operational life. The BM-TSM is easy to install through a 1-1/4" NPT process connection on the roof of the bin and sends an alert status to an external alarm or control panel.



## **Top-Mounted High Level Detection**

- · Mercury-free, easy to install and operate
- · Non-electrical, pendulum-type design
- · Fixed mounting on top of the bin
- Activates an alarm when material rises and tilts the switching mechanism
  15 degrees
- Shafts in custom lengths from 1 foot up to 8 feet
- Available with either a paddle or sphere
- Dual conduit entries for easy wiring
- Installs through a 1-1/4" NPT process connection
- 0°, 10° and 30° mounting options available
- Sends an alert status to an external alarm or control panel
- Hazardous location approvals





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