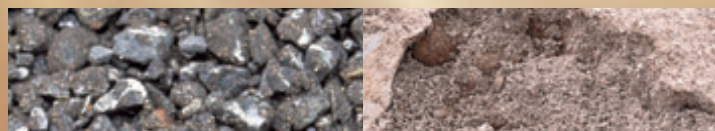


TC-1 TC-3

Tilt Switch

KEL-2

Leak Type
Level Switch



**Level measurement with
reliable operation !**



Tilt Switch TC-1

Use for bulk solids in 50mm or over such as coal, ore, broken stone and so on.

Tilt Switch TC-3

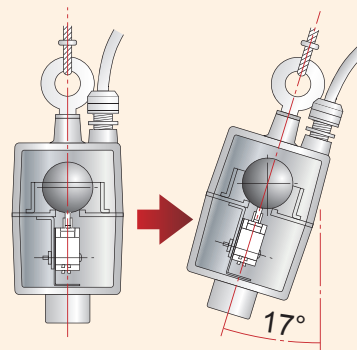
Suitable for Detecting Coarse Grains and Agglomerates. (small pieces)



Level switch detecting the presense of measured objects from change in the body's tilt.

■ Principle of Operation

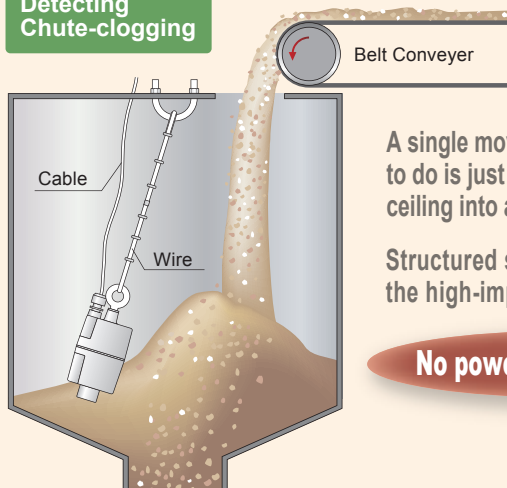
When the body suspended from the ceiling of a tank tilts due to the repose angle of the measured object, the switch detects its tilt, by which the contact is switched.



It houses steel ball inside and when the body gets upright, the steel ball centers itself on a microswitch.

When the body is tilted at 17° or more, the steel ball rolls off to deactivate the microswitch and switch the contact.

Detecting Chute-clogging

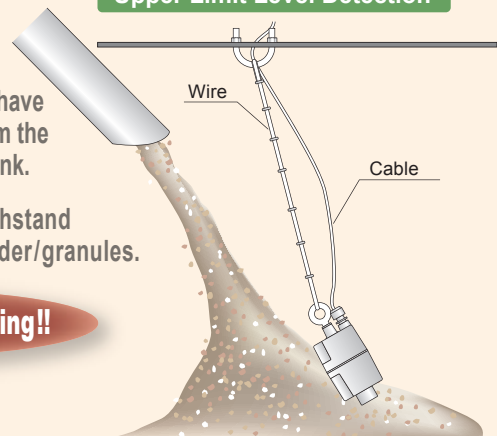


A single moving part, all you have to do is just to suspend it from the ceiling into an inside of the tank.

Structured simply, it can withstand the high-impact-load of powder/granules.

No power, low-cost wiring!!

Upper Limit Level Detection



■ TC-1 Specifications

Weight : About 11 kg (Cast-iron)
2 wire system

Output Contact : SPDT ×1

Contact Capacity : 250VAC 10A

Allowable Temperature : -10 to +120°C (No Condensation or Freez required)

Enclosure Rating : IP56

Conduit Connection : 1/4 – 3/8 inch cable, 1/2 inch screw

■ TC-3 Specifications

Weight : About 1.3 kg (Aluminum casting)
2 or 3 wire system

Output Contact : SPDT ×1

Contact Capacity : 250VAC 10A

Allowable Temperature : -10 to +80°C (No Condensation or Freez required)

Enclosure Rating : IP56

Conduit Connection : 1/4 – 3/8 inch cable, 1/2 inch screw

Leak Type Level Switch **KEL-2**



It can be used for all products including sand as building materials, gravel, crushed rocks and so on as long as they contain some moisture.

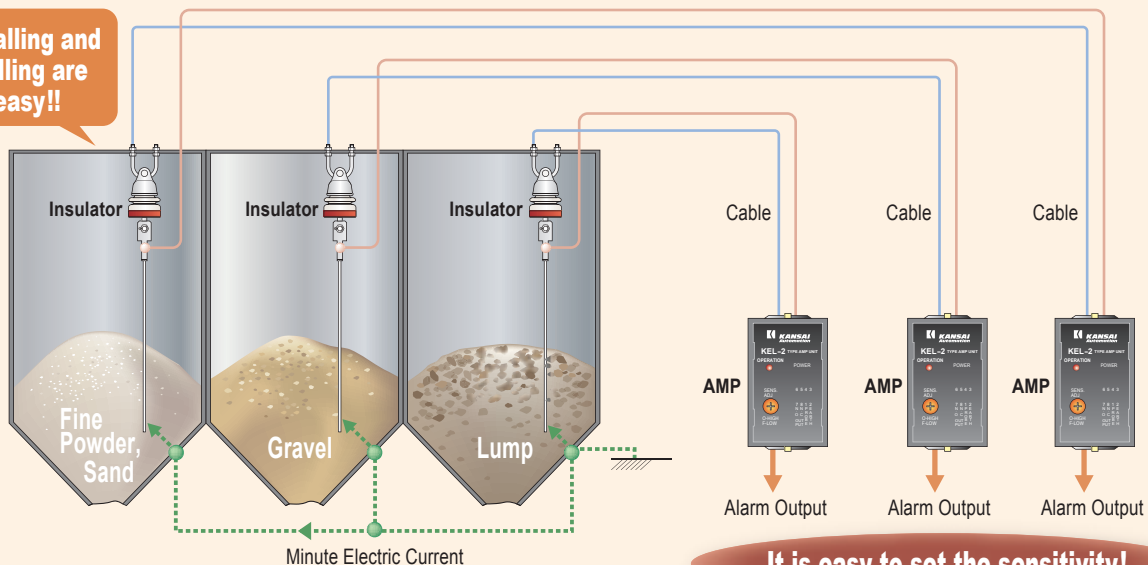
Suited for measuring Aggregate for Batcher Plant & Asphalt Plant, Crushed Rock, Limestone, Coal, Charcoal Dust, Coke, Ore, Viscosity and so on.

Level switch detecting the presence of measured objects from resistance change occurring between electrode and metal tank wall.

■ Principle of Operation

The electrode's contact with measured objects containing some moisture decreases resistance occurring between electrode and metal tank wall. Then the Switch detects the resistance change and the contact is switched. When there is no object, the output contact will return to the original position.

Installing and handling are too easy!!



It is easy to set the sensitivity!

■ KEL-2 Specifications

Power Source : 105/210VAC±10% 50/60Hz

Output Contact : SPDT ×1

Contact Capacity : 250VAC 10A

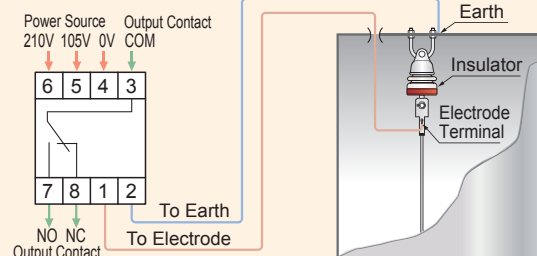
Allowable Temperature : 0 to +50°C (No Condensation or Freez required)

Sensitivity : Max.about 10MΩ – Min.about 30kΩ

Sensitivity Setting : 16 Steps adjustable between Max. & Min.

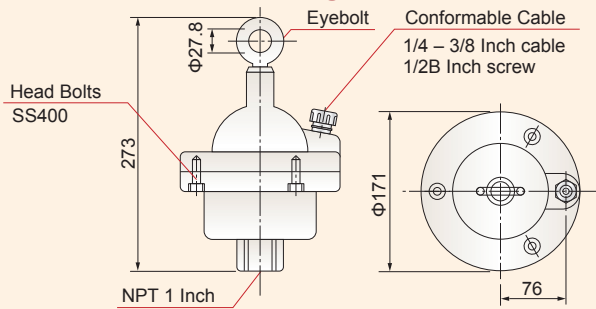
Indication Light : Operation Indicating Light (Light on detection)

■ Connection

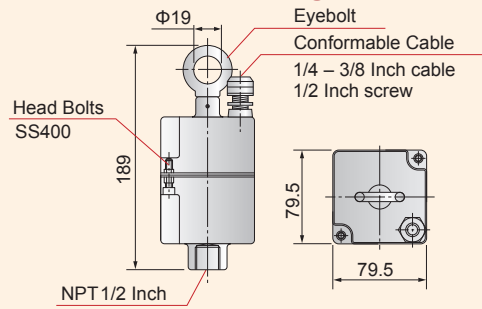


Tilt Switch

TC-1 Outline Drawing



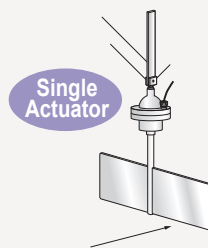
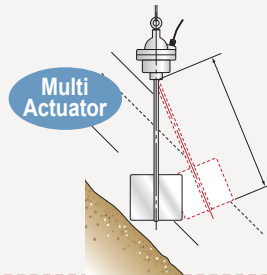
TC-3 Outline Drawing



Option

Sensitivity upgrade by actuator

You can upgrade the sensitivity of the tilt switch in mounting 2 or 4 paddle actuators.

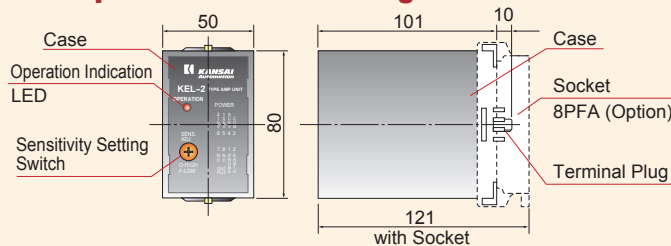


The actuators are fixed on the tilt switch body with 1/2" PF screws.

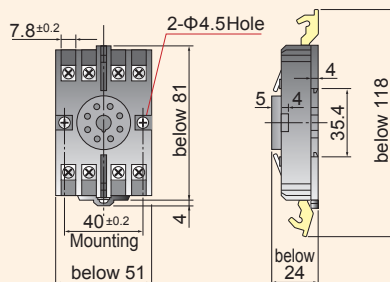
The dimensions of the actuators and the paddle forms are varied by the nature of materials, the mounting position and so on.

Leak Type Level Switch

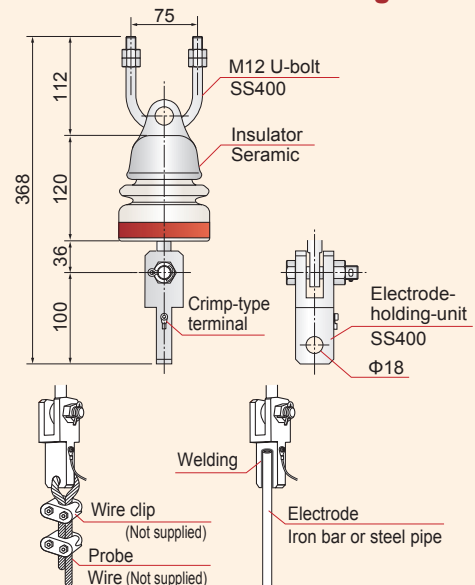
Amplifier Outline Drawing AMP



Socket (8PFA) Outline Drawing



Electrode Outline Drawing Insulator



Line of business

- Rotary Paddle Type Level Switch
- Vibration Type Level Switch
- Swing Type Level Switch
- Acoustic Level Switch
- Capacitance Type Level Switch
- Capacitive Proximity Sensor
- Capacitance Type Level Indicator
- Diaphragm Type Level Switch
- Tilt Switch
- Leak Type Level Switch
- Microwave Type Switch
- Sounding Bob Type Level Indicator
- Flow Switch
- Conductance Type Level Switch
- Float Switch
- Float Type Level Indicator
- Ultrasonic Type Level Indicator
- Equipments For Conveyor Lines
- Dust Monitor System
- Zirconia Oxygen Analyzer
- Laser Type Level Indicator
- RADAR Type Level Indicator
- On-line Sensors for Accurate Liquid Analysis
- Ultrasonic Flow meter

*Please be sure to read USER'S GUIDE, Installation & Operation Instructions before using the instrument.

*The specifications herein may be subject to change without advance notice.

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