



Capacitive Silo Level Sensor

The SEVEN Capacitive Silo Level Sensor is used for detecting the level of solid materials, such as powders or granules, in silos, tanks, and bunkers.

Capacitive sensors detect materials by utilizing the electric field created by electric charges. When the product to be detected comes near or makes contact with the sensor, the capacitance value changes according to the adjustable sensitivity level, and this data is sent to the automation system through the sensor's relay. The status of the sensor can also be monitored via the warning light on the sensor.

The Warning Light operates in 3 different modes:

- When the warning light is continuously off, it indicates that there is no power to the sensor.
- When the warning light is flashing, it indicates that the silo is not yet full.
- When the warning light is continuously on, it indicates that the silo is full.

Benefits and Features

- Adjustable Level Sensitivity
- Fast Detection
- Durable Enclosure
- Vertical Mounting
- Optional Rope Length
- Status Monitoring with Warning Light
- SEVEN Customer Support
- 1 Year Warranty

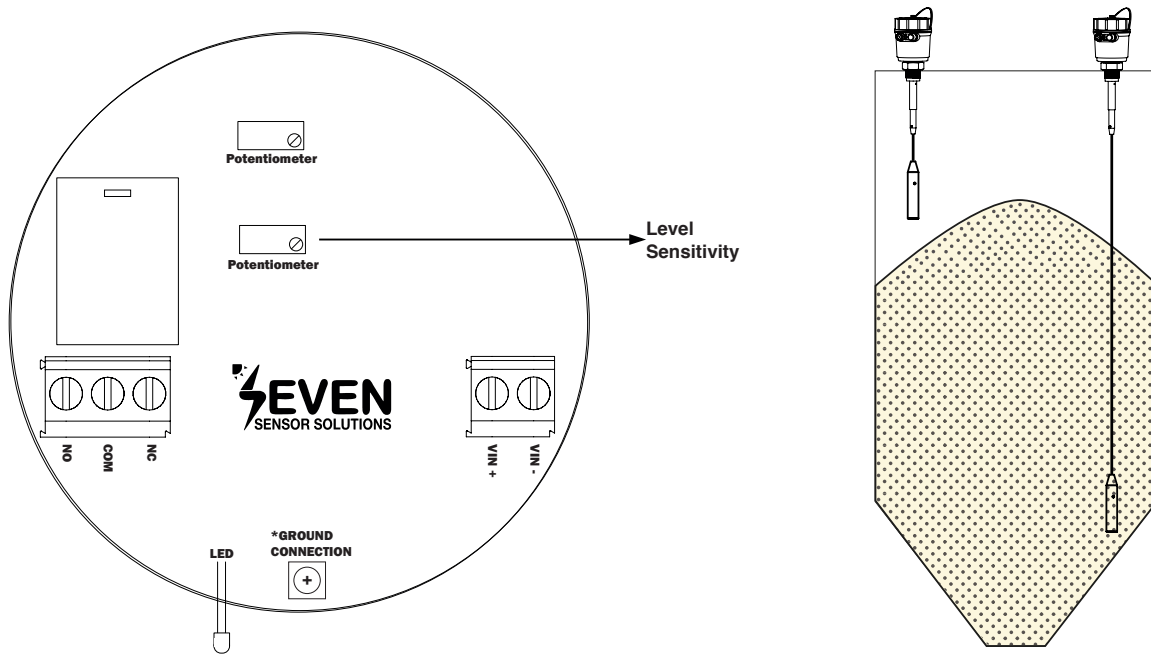
Technical Specifications

Sensor Type	Capacitive
Sensor Modeling	3S-SLS-CA-1 : (1-meter rope length) 3S-SLS-CA-2 : (2-meter rope length)
Power Supply	18 ... 26 VDC
Sensitivity	Adjustable Level Sensitivity
Frequency	3 MHz
Response Time	1 sec. Max
Output	Relay output ON / OFF control DC max. 125V/10A
Operating Temperature Range	-40°C ... + 65°C
Operating Humidity Range	0 ... 100 %RH
Dimensions	132 x 103 x 331 mm (L x W x H)
Weight	1600 gr
Body Material	Polyamid + Fiberglass
Rope Material	PVC Coated Steel
Origin	TÜRKİYE



The standard rope length is 100 cm. It can be increased or decreased upon request

General Structure



When the solid material in the silo, tank, or bunker is below the set level of the capacitive silo sensor or when these storage units are empty, the COM–NC connection becomes active, and the warning light starts flashing.

When the solid material in the silo, tank, or bunker is at or above the set level of the capacitive silo sensor, the COM–NO connection becomes active, and the warning light remains steadily on.

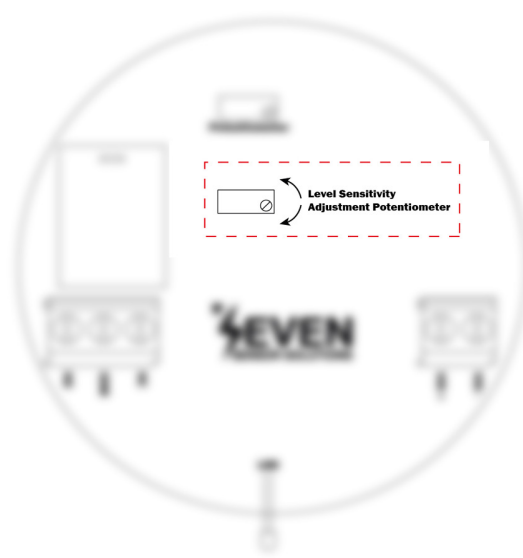
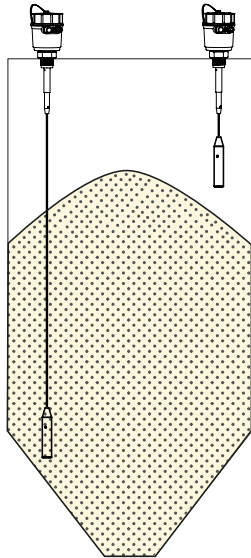


Voltages above 26V may damage the electronic board, while voltages below 18V may cause the system to operate unstably.



It is recommended to establish a grounding connection to minimize the sensor's susceptibility to electrical noise.

Calibration



For product calibration, fill the silo/tank/bunker to the desired trigger level, then adjust the calibration potentiometer on the product by rotating it with a screwdriver until the LED light remains steady. The point at which the LED light remains steady is the calibration point.



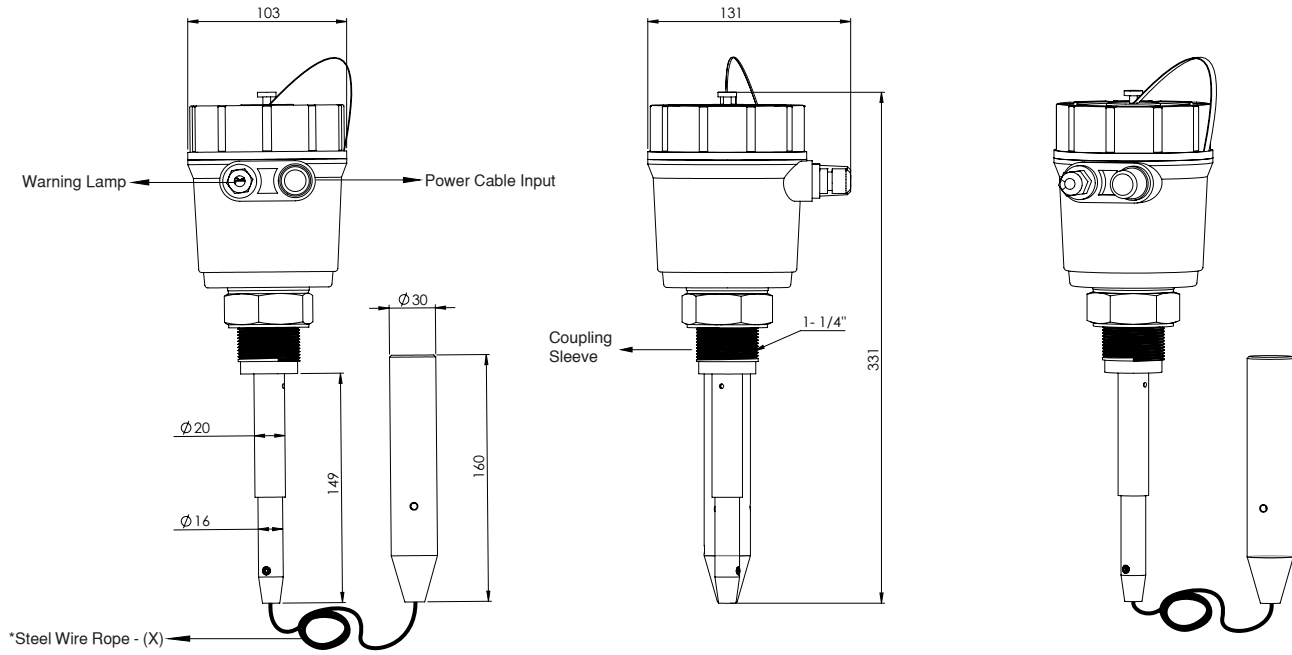
A second calibration may be required due to dust accumulation on the product after use.



It is recommended to periodically clean the Capacitive Silo Level Sensor when used with products containing high levels of dust.

Technical Drawings

3S-SLS-CA-X



Note: All measurements are given in mm.

*The rope length in the 3S-SLS-CA-1 model is 1 meter.

*The rope length in the 3S-SLS-CA-2 model is 2 meters.