



# RF Capacitance Level Switch



## **NIVOLARM**

ALC 810

ALC 830

ALC 860

### **Features**

- Offered with a wide range of probes
- Compact Design
- Universal Power supply
- Field selectable fail-safe operation
- Conforms to International Standards
- Remote monitoring



# RF Capacitance Level Switch

The RF Capacitance level switch provides accurate and reliable detection of conducting as well as non-conducting liquids, solids or slurries, stored in open or closed containers. It can also detect the level of material flowing in closed pipes, open channels or moving on conveyor belts. The performance of the instrument is independent of properties like conductivity and corrosiveness and of process parameters such as temperature and pressure.

The instrument works on the field proven RF Technology. A RF signal is applied to the probe and the tank (reference). A change in the level results in a change in the admittance between the probe and the tank. This change is detected by the electronics and an alarm generated.

#### Offered with a wide range of probes

Ensures compatibility with a large number of applications.

#### Compact Design

Suitable for installation in restricted spaces.

#### Universal Power supply

Accepts any voltage from 85 Vac to 265 Vac.

#### Field selectable fail-safe operation

Offers reliable detection of high and low level.

#### Conforms to International Standards

Designed to meet global requirements and available with international approvals.

#### Remote monitoring

Easy monitoring of the process even in hard to reach places.

## NIVOLARM

### ALC 810

Compact

## NIVOLARM

### ALC 830

General Purpose

## NIVOLARM

### ALC 860

Intelligent



### Technical Specifications

|                       |   |
|-----------------------|---|
| Mains Supply          | : 85 Vac to 265 Vac, 50/60 Hz,<br>Option : 18 Vdc to 30 Vdc |
| Outputs               | : LED, Relay, Open Collector                                |
| Time Delay            | : 2 to 30 seconds adjustable                                |
| Process Pressure      | : 10 bar max<br>Option : 24 bar max                         |
| Process Temperature   | : 80°C max.<br>Option : +450°C max.                         |
| Ambient Temperature   | : -20°C to +60°C  |
| Housing               | : Cast Aluminum   |
| Max. Insertion Length | : Rod Probe : 3,500 mm<br>: Rope Probe : 20,000 mm          |
| Protection            | : IP67<br>Option : Ex-proof Protection<br>EEx ib IIB T4     |



## Product Range

A wide range of converters are available to suit the specific customer needs.

### *Compact Model*

For OEM's and for installation in restricted spaces. The electronics is enclosed in a compact housing and integrated with the probe into a single mechanical unit.

### *General Purpose Model*

Simple to use, having all the essential features. Suitable for most of the typical applications.

### *Intelligent Model*

Microcontroller based instruments incorporating all the features of the general purpose instrument and offering additional confidence in the output signal with built-in diagnostics.

### *Operation in Hazardous Locations*

The instruments are also available with Intrinsically safe electronics or Explosion proof housings for use in potentially explosive environments.

### *Sanitary Version*

Available with sanitary connections and stainless steel construction for use in hygienic applications in the Food, Beverage and Pharmaceutical Industries.

**A variety of rod and rope probes are available for optimal suitability with the following applications.**

- Corrosive
- High Temperature and Pressure
- Vacuum
- Applications with build-up
- Sanitary Applications
- Materials with low dielectric constant



Nivo RF Capacitance Level Switches provides trouble free sensing of

**Liquids**

Water  
Acids  
Juices  
Alkalis  
Oils

**Slurries**

Coal Slurry  
Sugar Syrup  
Ore Slurry

**Pastes**

Fruit Pulp  
Gum  
Chocolate  
Molasses

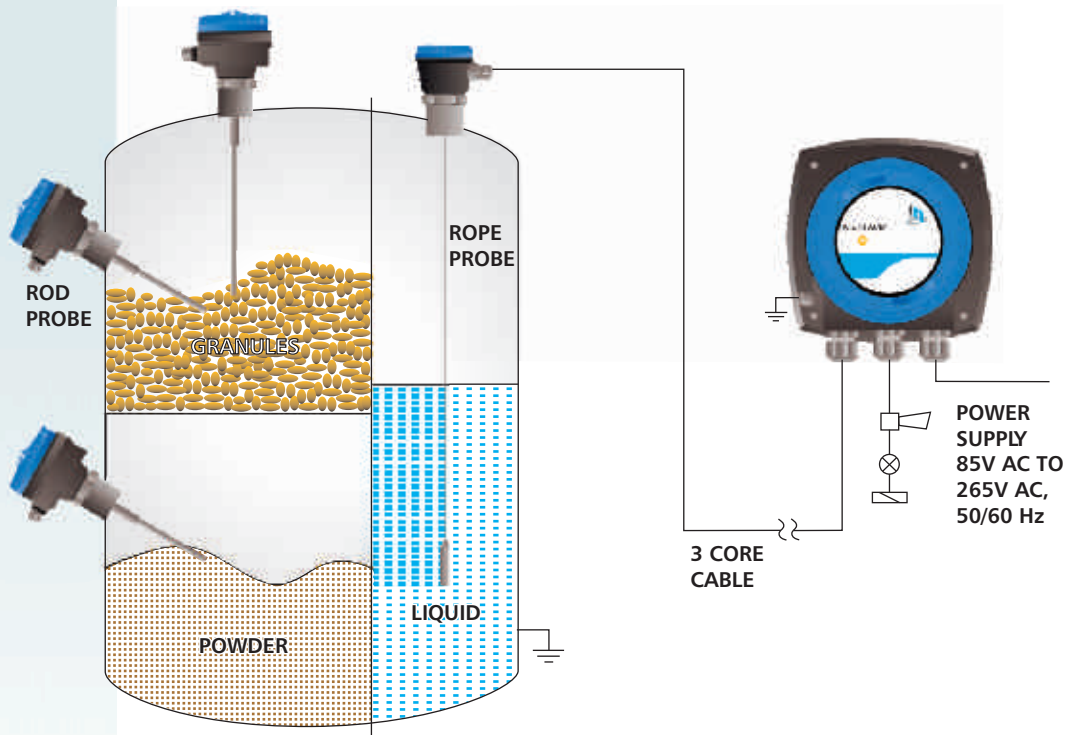
**Dry Powders**

Cement  
Fly ash  
Coffee powder  
Milk powder  
Chemicals

**Solids**

Food Grains  
Fertilisers  
Sugar Crystals  
Coal  
Limestone

And many more!



*We reserve the right to modify the technical data without prior notice.*



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