

# Capacitive

Capacitive sensors for automation of processes



CAPACITIVE



# Robust and Reliable Capacitive Sensors

We produce capacitive sensors for automated processes in feed and grain handling.

Our capacitive sensors are used for detecting solid and loose materials and for the automation of processes, where there is a need for controlled conveyance and storage of materials. The capacitive sensors ensure an efficient and seamless handling of grain and other feedstuffs, and can be used for handling wood, plastics, and other granular materials. Our large product range includes both smooth cylindrical sensors, threaded cylindrical sensors, and flat sensors.

- Detection of feed and grain in feed systems for livestock production
- Large range of functional, mechanical, and electrical variants to meet every need
- Designed for aggressive environments in livestock houses and industrial facilities
- CE, UL, CSA and ATEX approvals



DOL 26 Capacitive Sensor



dolo SENSORS  
www.dolo-sensors.com  
Hedelund 4, DK-7870 Roslev  
20-280V AC/DC 500mA  
CAP 4M341F-CR-5CR-5-27



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## iDOL 20 / DOL 20 Capacitive Sensor



DOL 20 is a flat sensor, which can be used to measure the level in hoppers, feed pans, silos, bins, or for control of poultry feed lines. DOL 20 can be mounted on the outside of a plastic or composite shell, since it can detect the level through this material. The sensor is extremely sturdy to error situations such as short circuits and overload and has a long lifetime even in harsh environments. The sensitivity of DOL 20 sensor can be fixed or adjustable using trimmers to match various types of feed. The sensitivity of iDOL 20 sensor can be adjusted using the SmartAdjust App.

**[Read more about iDOL 20 / DOL 20 Capacitive Sensor here.](#)**

## iDOL 26 / DOL 26 Capacitive Sensor



DOL 26 is a capacitive sensor for detecting loose and solid materials such as feed, plastic or wood pellets, grain, and bedding. The sensor can for example help ensure sufficient feed distribution in livestock houses or distribution of the right number of pellets in a pellet stove. Due to the mechanical design of DOL 26, the sensor is ideal for inclusion in small applications with limited space such as inside feed trough in poultry farms. In this way the sensor is kept away from the reach of the animal. DOL 26 is immune to EMI, short circuits, and any overload. No more burned off sensors due to installation mistakes!

**[Read more about iDOL 26 / DOL 26 Capacitive Sensor here.](#)**

## iDOL 27 / DOL 27 Capacitive Sensor



DOL 27 and iDOL 27 is a 30 mm capacitive sensor designed for detecting loose and solid materials. The sensors have highly unique functionalities for the agricultural and industrial industry. LED lights indicate status of the sensors. The DOL 27 and iDOL 27 capacitive sensors are immune to EMI, short circuits, and any overload which prevents sensors from burning off due to installation mistakes. The ON and/or OFF delay, MaxRunTimer, Make/Break contact, and sensitivity of the sensor can be fixed or adjusted using a trimmer or the SmartAdjust App to suit different motor control units.

**[Read more about iDOL 27 / DOL 27 Capacitive Sensor here.](#)**



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## iDOL 28 / DOL 28 Capacitive Relay Sensor



The DOL 28 and iDOL 28 sensors are unique 30 mm capacitive relay sensors for detection of feed, grain, and solids in a feeding system. The sensor features a built-in powerful relay with switch function. The sensor has a white LED for illuminating the feed pan. DOL 28 and iDOL 28 feed sensors are intended for feed pans in poultry production, where the light will ensure that the pan with the sensor gets attention from the birds. Which again ensures a stable feed supply. Two trimmers or the SmartAdjust App make it easy to change settings of product parameters.

**[Read more about iDOL 28 / DOL 28 Capacitive Sensor here.](#)**

## DOL 40 Series



The DOL 40 series comprises three models with different functionalities. The DOL 41 has no time delay, the DOL 43 has the option of delayed disconnection and the DOL 45 additionally has the option of delayed switchon. Two push button switches adjust the sensitivity of the sensor and the time with light diodes indicating when the switches are activated. The sensor is CE and C-UL approved and has a high immunity to noise from electric communication (i.e. from a mobile phone) and transients (i.e. from motors and contactors). This makes the sensors very reliable.

**[Read more about the DOL 40 Series here.](#)**

## iDOL 44 / DOL 44 Capacitive Sensor



DOL 44 is a complete range of 30 mm capacitive feed sensors with relay output. Settings are easily changed via two trimmers using a small screwdriver and with the SmartAdjust App for iDOL 44. DOL 44 has a high immunity to noise from electric communication (e.g. mobile phones) and transients (e.g. from motors and contactors). DOL 44 is available in a multitude of versions, such as the DOL 44RH with integrated heater for cold and/or high humidity applications, DOL 44RT for detection of feed in tubes and DOL 44R-33 with conical 32 mm enclosure.

**[Read more about iDOL 44 / DOL 44 Capacitive Sensor here.](#)**



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## iDOL 46 ATEX Approved Capacitive Sensor



The iDOL 46 ATEX sensor is approved according to ATEX directive 2014/34/ EU and IECEx for operation in potentially explosive dust atmospheres. The sensor is classified for explosion group II, which concerns all remaining risk areas but mines. iDOL 46 ATEX is classified as equipment for use in atmospheres with continuous presence of explosive dust with an ignition temperature above 85 °C. The ATEX approval makes the sensor suitable for installations where dust poses an imminent explosion risk classified according to Zone 20 and 21. iDOL 46 ATEX sensor has a robust design with plastic housing with 7 joule shock/impact test.

[Read more about iDOL 46 ATEX Capacitive Sensor here.](#)





## Accessories

dol-sensors offers a wide range of spare parts and accessories that facilitate mounting and servicing capacitive sensors.

### T-piece for mounting sensors on tubes



The T-bracket makes it easy to mount 30 mm sensors on plastic pipes in pipe systems where the sensor detects the material through the plastic wall of the pipe. The bracket is suitable for pipes with diameters between 40 and 60 mm.

### Plastic glands



The plastic gland can be mounted in a silo wall for example by means of an internal locknut or from the outside by means of the enclosed flange.

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