

iDOL 46 ATEX Capacitive Sensor

An ATEX approved capacitive proximity sensor designed for potentially explosive dust atmospheres.

iDOL 46 ATEX capacitive/proximity sensor is a 30 mm ATEX approved feed sensor designed for general detection of feed, grain, and solids.

For Potentially Explosive Dust Atmospheres

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 oC.

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.

A Flexible Sensor with Easy Adjustment

Using the user-friendly SmartAdjust app on your smartphone allows you to easily adjust the sensing distance, ON and/or OFF delay, and MaxRunTimer.

The SmartAdjust app allows for more parameters to be available for the user, compared to a traditional capacitive sensor. The result is a more flexible sensor, which can be adapted to the individual need of the user.

Benefits

- Flexible sensor
- Easy adjustment
- Easily mounted
- Reliable sensor with long life time

Advantages

- Approved according to ATEX directive 2014/34/ EU and IECEx for operation in potentially explosive dust atmospheres
- LED indicators for sensor status and power on
- IP 69k protection
- UL approved



iDOL 46R capacitive sensor



iDOL 46R capacitive relay sensor series is designed for general detection of feed, grain and solids. Certified according to ATEX directive 2014/34/EU, IECEx for operation in hazardous, potentially explosive dust atmospheres. Classified as equipment for use in atmospheres with continuous presence of explosive dust with an ignition temperature above 85 °C.

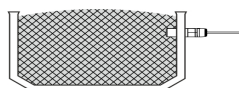
RELIABILITY

The sensor's electronics are completely embedded in a thermoplastic casing, there is shock/impact test with 7 joule. This achieves a very high resistance to moisture and other external influences in aggressive environments. The sensor is CE-approved and has a high immunity to noise from electric communication (e.g. from mobile phone) and transients (e.g. from motors and contactors). This makes the sensor very reliable and dependable in operation.

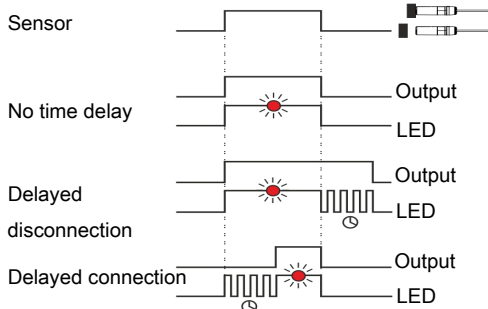
Adjustment

iDOL 46R settings can be adjusted with the SmartAdjust app.

A red LED clearly indicates the current status of the sensor and a green LED indicating power on sensor. LEDs can be switched off.



LED sequence



Functional description

Delayed disconnection:

fixed delay *or* delay can be adjusted via the SmartAdjust app.

Delayed connection:

fixed delay *or* delay can be adjusted via the SmartAdjust app.

Sensitivity:

fixed distance *or* distance can be adjusted via the SmartAdjust app.




MaxRun-timer:

iDOL 46R adjusted 1-7200s via SmartAdjust app

Building-in

iDOL 46R can be mounted in a plastic gland, which can also be supplied as a flange solution for external mounting.

Technical data

Electrical			
Supply voltage	V AC/DC	20-280	
Frequency	Hz	47 - 63	
Relay switch max. Voltage	V AC	250	
Max. resistive load, 250 V AC	A	4	
Max. inductive load, 250 V AC	A	2	
Min. relay current, 12 VDC	mA	100	
Safety		Relay switches and supply voltage are galvanically separated. Test voltage 4 kV AC	
Specifications			
Distance of activation		Adjustable 0-20 mm depending on material	
Time delay		Adjustable 0-3600 sec.	
MaxRun-timer		Adjustable 0-7200 sec.	
SmartAdjust		   Activated NFC required	
Mechanical			
Sensor length	mm (inches)	117 (4 ⁵ / ₈)	
Sensor diameter	mm (inches)	30 (1 ³ / ₁₆)	
Cable dimensions	mm ² (AWG)	5x 0,5 (5 x 20)	
Cable length	m (ft.)	Standard 2 (6.6) / Max 10 (32)	
Cable type		UL2517	
Weight incl. cable	2 m	g (oz)	245 (8.64)
	5 m		453 (15.98)
	10 m		783 (27.62)

Environment		
Operating temperature	°C (°F)	-30 - +50 (-22 - +122)
Storage temperature	°C (°F)	-40 - +80 (-22 - +176)
Protection class	IP (NEMA)	IP69K (1, 3, 4, 6, 12, 13)
Approval		<p>ATEX zone 20, 21 and 22, dust IECEx conforms to the Harmonized Standards CE₀₅₃₉ Ⓢ II 1D Ex ta IIIC T₂₀₀ 85 °C Da UL 60079-0, 7th Edition UL 60079-31, 2nd Edition</p>

Dimensions

