

Capacitive Relay Sensor DOL 44R Series

The DOL 44R capacitive relay sensor series is designed for general detection of feed, grain and solids.



TYPICAL APPLICATIONS

A capacitive relay sensor is typically used as empty, full and level indicator in tanks, silos and containers. The powerful integrated relay means that it can control many functions directly.

THE DOL 44R SERIES

The DOL 44R series of capacitive relay sensors from dol-sensors are sturdy and easy to operate.

Two trimmers make it easy to change settings of two product parameters, depending on the model.

A red LED clearly indicates the current status of the relay sensor

FUNCTIONAL DESCRIPTION

DOL 44R is available with different functions.

Delayed disconnection – when the load stops, the time delay starts:

- Fixed time or
- Time adjustable on trimmer

Delayed connection – when the load stops, the time delay starts:

- Fixed time or
- Time adjustable on trimmer

Sensitivity:

- Fixed distance or
- Distance adjustable on trimmer

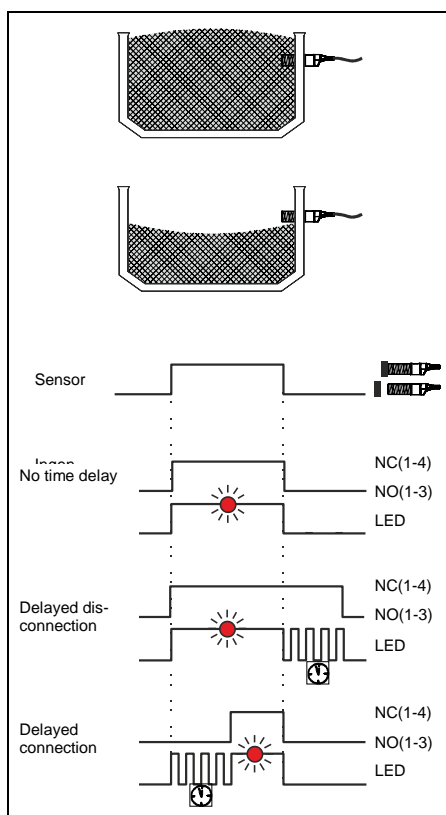
MaxRunTimer:

- Settings on the trimmer: Off, Period 1, Period 2

Temperature-controlled heat function (DOL 44RH):

- Reliable robust use down to -40 °C
- Prevents the built-up of condensation and frost on the sensor

The actual functionality of the sensor is indicated on the product label.
See www.dol-sensors.com for further information.



TECHNIQUE

The DOL 44R series features a built-in powerful relay with switch function. The sensors are available in two variants with the following voltage range:

- 10 - 30 V AC/DC
- 90 - 265 V AC
- 20 - 280 V AC/DC

The heat function is only possible for the 90-265 V AC voltage version.

RELIABILITY

The use of electronic rather than mechanic switches ensures a unique reliability, particularly as the electronics are completely encapsulated in special plastic, which provides maximum protection against humidity and other external influences in harsh environments.

The sensor is CE, C-UL and 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).

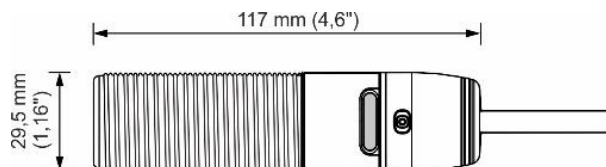
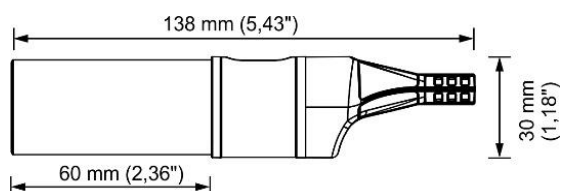
This makes the sensor very reliable.

BUILDING-IN

The DOL 44R is easily mounted in a plastic gland, which is also available as a flange solution for easy external mounting. Likewise, the sensor is supplied with thread, which provides several mounting options.

When DOL 44R is to replace DOL 33, it is mounted using Adapter for DOL 40R/PG36 (140113).

DIMENSIONS



TECHNICAL DATA

Supply voltage:	10 - 30 V AC/DC or 90 - 265 V AC or 20 - 280 V AC/DC
Frequency:	47 - 63 Hz
Relay switch max. voltage:	250 Volt AC
Relay switch max. power:	Ohms load: 5 A Inductive load: 2 A
Safety:	Relay switches and supply voltage are galvanic separated. Test voltage 4 kV AC
Distance of activation:	Adjustable 0 - 15 mm depending on material. Factory setting for grain
Time delay:	Adjustable 0-600 sec. Factory setting: 30 sec.
Protection class:	IP69k. NEMA 1, 3, 4, 6, 12, 13
Surrounding temperature, operation:	-20 °C - +70 °C (-4 °F - +158 °F)
Surrounding temp., oper. UL 508	-20 °C - +65 °C (-4 °F - +149 °F)
Surrounding temperature, storage:	-30 °C - +80 °C (-22 °F - +176 °F)
Temp. operation and storage with heat function	
Length:	138mm (5.43") / 117mm (4.6")
Diameter:	30 mm (1.16")
Cable:	5 x 0.5 mm ² (5 x AWG20) 2 m (6.6 feet)
Style:	UL2517
Weight incl. cable:	290 g (10.2oz)
Accessories, supplied:	Instruction
Approvals:	CE, C-UL, UL