

# DOL 44R-T sensor

## Capacitive Relay-Sensor



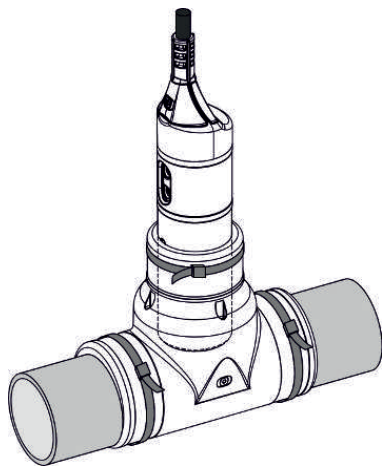
For other language variants of this document we refer to [www.dol-sensors.com](http://www.dol-sensors.com) or your local dealer.

## 1 Product description

DOL 44R-T is designed for general detection of feed, grain and solids in tanks, silos and containers. The powerful integrated relay means that it can control many functions directly.

The sensor's electronics are completely embedded in a thermoplastic casing. This achieves a very high resistance to moisture and other external influences in aggressive environments. The sensor is CE, C-UL and UL 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.

## 2 Mounting guide



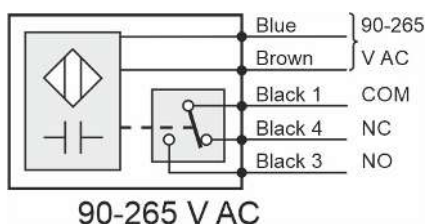
Use the supplied cable ties to mount the sensor on the feed line. The sensor only works if mounted on  $\varnothing 40-60$  mm plastic pipes.

The sensor needs to be in direct contact with the plastic pipe. This can be verified by checking that the edge of the sensor is flush with the lower edge of the bracket.

## 3 Installation guide



Installation, servicing and troubleshooting of all electrical equipment must be carried out by qualified personnel in compliance with the applicable national and international standard EN 60204-1 and any other EU standards that are applicable in Europe.



Supply voltage is connected to the blue and brown wire.

The load is connected in series with the relay contact of the sensor.

**STOP** by activating the sensor: Use the black wires 1 and 3.

**START** by activating the sensor: Use the black wires 1 and 4.

**NOTE!** The internal relay is in position NC when the supply voltage is connected and the sensor is activated - wire 1 and 4 are connected.

## 4 User Guide

Relay NC(1-4)



Relay NO(1-3)  
after delay



LED sequence



Sensor



No time delay



Output

LED

Delayed

disconnection



Output

LED

Delayed connection



Output

LED

DOL 44R-T series is available with different functions

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 sensor

The actual functionality of the sensor is indicated on the product label

**Delayed disconnection** - when the affect stops, the time delay starts:

fixed delay *or*

delay can be adjusted on the trimmer

**Delayed connection** - when the affect stops, the time delay starts:

fixed delay *or*

delay can be adjusted on the trimmer

**Sensitivity:**

fixed distance *or*

distance can be adjusted on the trimmer

**MaxRunTimer:**

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

## 5 Technical data

<b>Electrical</b>		
Supply voltage	V AC	90-265
Frequency	Hz	47 - 63
Max. resistive load, 250 V AC	A	5
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
<b>Specifications</b>		
Variant understanding	<div style="text-align: center;"> <b>DOL 44R R H G T</b> </div> <div style="display: flex; justify-content: space-around; margin-top: 10px;"> <div style="text-align: center;"> <u>Series</u>  <u>Delayed disconnection</u> </div> <div style="text-align: center;"> <u>Tube mount</u>  <u>Thread</u>  <u>Heating</u> </div> </div>	
Distance of activation		Adjustable distance depending on variant
Time delay		Adjustable time depending on variant

<b>Mechanical</b>		
Sensor length	mm (inches)	180 (7 1/16)
Sensor diameter	mm (inches)	30 (1 3/16)
Cable dimensions	mm <sup>2</sup> (AWG)	5x 0,5 (5 x 20)
Cable length	m (ft.)	Standard 2 (6.6) / Max 10 (32)
Cable type		UL2517 / UL20549
Weight incl. cable	g (oz)	
<b>Environment</b>		
Operating temperature	°C (°F)	-20 - +70 (-4 - +158)
Operating temperature UL 508	°C (°F)	-20 - +65 (-4 - +149)
Storage temperature	°C (°F)	-30 - +80 (-22 - +176)
Protection class	IP (NEMA)	IP69K (1, 3, 4, 6, 12, 13)
Approval		CE, C-UL & UL

## 5.1 Dimensions

