

DOL 40R series Capacitive Relay-Sensor



DOL 40R series 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.

RELIABILITY

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.

Sensor	 :			Activated Not active
No time del	a <u>y</u>	Red		
Delayed disconnecti	on	Red		een
Delayed connection		Red	 L	Green

Functional description

DOL 41R has no time delay.

DOL 43R has an option for delayed disconnection. Time delay starts When the activation stops (red flash) When this time stops, the relay switches back.

DOL 45R has Apart from the settings mentioned above, also has the option of delayed connection. The time delay starts when the sensor is affected. When the delay period runs out, the relay will switch. The relay does not switch back until the activation stops.

DOL	Sensitivity	Delayed disconnection	Delayed connection
41R	•		
43R	•	•	
45R	•	•	•

Building-in

DOL 40 series can be mounted in a plastic gland, which can also be supplied as a flange solution for external mounting. Likewise the sensor is available with thread which provides several mounting options.

SENSOR FOR PIPE TRANSPORT

DOL 40R series also includes a DOL 45R-T sensor. This model has been specially developed for the detection of materials in pipe systems, e.g. feed strings in dry feeding systems. The setting of sensitivity is more accurate and the factory preset is 20 sec. ON-delay.

Technical data

Electrical			
Supply voltage variant depending	V AC/DC V AC	10-30 90-250	
Frequency	Hz	50 - 60	
Relay switch max. current	V AC	250	
Relay switch max. current AC	A	5 A at $\cos \varphi = 1$ 2 A at $\cos \varphi = 0.8$ 0.35 A at $\cos \varphi = 0.4$	
Relay switch max. current DC	A	5 A at 0-30 V DC	
Safety		Relay switches and supply voltage are galvanically separated. Test voltage 4 kV AC	
Specifications			
Variant understanding		Series DOL 45R G T Tube mount	
Distance of activation		Adjustable 0-15 mm depending on material Factory setting is grain.	
Time delay		Adjustable 0 - 240 min. Factory setting is 30 sec.	
Mechanical			
Sensor length	mm (inches)	110 (4 5/16)	
Sensor diameter	mm (inches)	30 (1 3/16)	
Cable dimensions	mm ² (AWG)	5x 0,75 (5 x 18)	
Cable length	m	1.5	
Cable type		UL2517	
Weight incl. cable	g	290	
Environment			
Operating temperature	°C (°F)	-20 - +70 (-4 - +158)	
Storage temperature	°C (°F)	-30 - +85 (-22 - +185)	
Protection class	IP	IP67	
Approval		CE, C-UL & UL	

Dimensions

