iDOL 20SCR (2-wire capacitive sensor)

PRODUCT

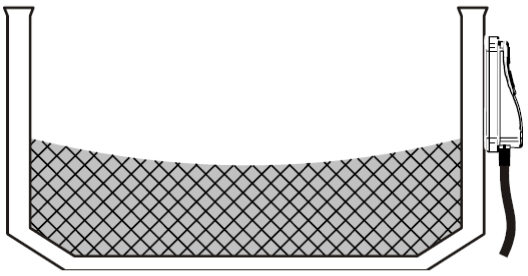
- iDOL 20SCR is a 2-wire capacitive sensor for detecting loose and solid materials.
- iDOL 20SCR is extremely sturdy to error situations such as short circuits and overload.
- The product is suitable together with contactors, relays and similar within the agricultural and industrial sectors.
- The mechanical design makes iDOL 20SCR ideal for integration into applications with limited space.

FUNCTIONALITY

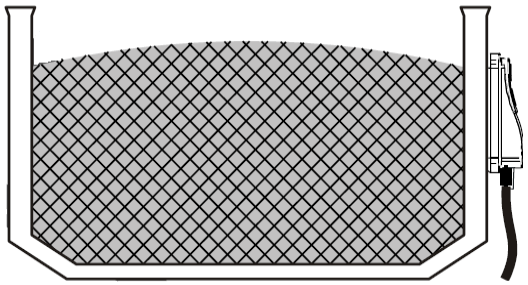
- iDOL 20SCR can be supplied with 20-280 VAC/VDC and a max. current (I_e) of 500 mA.
- The sensitivity of the sensor can be adjusted using the SmartAdjust App to suit different types of feed.
- The ON and OFF delay of the sensor can be adjusted using the SmartAdjust App to suit different motor control units.
- The Output function (reverses the ON/OFF function of the sensor) can be adjusted using the SmartAdjust App.

ACCESSORIES

- 522237 Frame for attaching the sensor to level surfaces
  - Available with iDOL 20SCR
- 140135 DropTube for fitting / adjusting the sensor to feed drop systems



ON



OFF

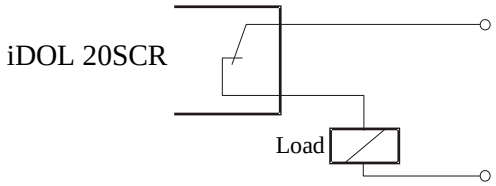
LED indication	Sensor status
LED OFF	Sensor is OFF
LED is flashing fast	ON or OFF delay is active
LED is flashing slowly	The sensor is not programmed, factory settings are used
LED ON	Sensor is ON

TECHNICAL DATA

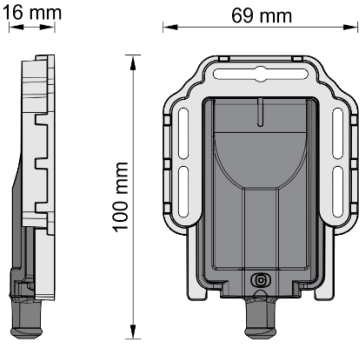
Specifications	Parameter	Unit
Rated voltage (U_e)	20 - 280 20 - 280	VAC VDC
Frequency	47 - 63	Hz
Max. current (I_e)	500	mA
Direct connection to U_e (current >> 500 mA) without damage to the sensor	>10	Times
Min. ON current (I_m)	<10 (U_e = 20 - 90) <4 (U_e = 90 - 280)	mA RMS / mA DC
OFF current (I_r)	<3 (U_e = 20 - 90) <1 (U_e = 90 - 280)	mA RMS / mA DC
Voltage drop (U_d) (current > 20 mA)	<6	V RMS / V DC
Time delay, start-up	<150	ms
Time delay, ON (adjustable)	0 - 3600	s
Time delay, OFF (adjustable)	0 - 3600	s
Operating distance (S_n) (adjustable)	0 - 12 (0 - 0.47)	mm (inches)
Safe activation distance (S_a)*	4 - 10 (0.16 - 0.39)	mm (inches)
Repeatability (R)	5	%
Hysteresis (H)	4 - 10	%
MaxRunTimer* (adjustable)	0-7200	s
LED indicator for sensor ON	Red LED	
Temperature, operation	-20 - +70 (-4 – +158)	°C (°F)
Temperature, operation, US and Canada, I_e < 300 mA	-20 - +70 (-4 – +158)	°C (°F)
Temperature, storage	-40 - +80 (-40 - +176)	°C (°F)
Protection class	69 k 1, 3, 4, 6, 12, 13	IP NEMA
Cable length*	1.5 (4.9)	m (ft.)
Cable conductor size	2x0.5 (2x20)	mm² (AWG)
Frame for mounting sensor	Included	
Approvals	CE, C-UL, UL	

*Option – can be changed upon request. See the current functions in the product label.

CHART SHOWING SENSOR AND LOAD



SENSOR DIMENSIONS



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