



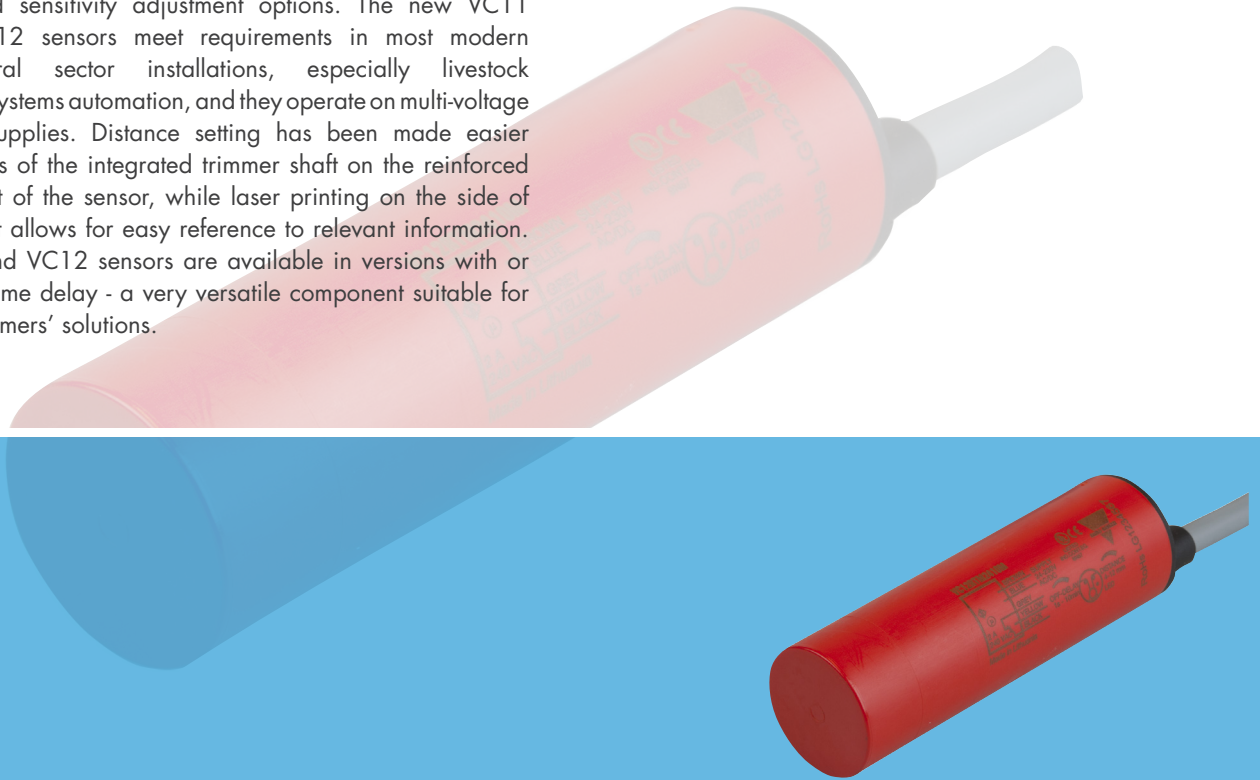
## **VC11/12 Series - Capacitive Sensors**

# **Sensors**

# VC11/12 Series

## Capacitive sensors with relay output

Based on the popular and successful VC11 and VC12 sensor series, our new generation of capacitive sensors features improved EMC performance as well as accurate time and sensitivity adjustment options. The new VC11 and VC12 sensors meet requirements in most modern agricultural sector installations, especially livestock feeding systems automation, and they operate on multi-voltage power supplies. Distance setting has been made easier by means of the integrated trimmer shaft on the reinforced back-part of the sensor, while laser printing on the side of each unit allows for easy reference to relevant information. VC11 and VC12 sensors are available in versions with or without time delay - a very versatile component suitable for our customers' solutions.



### Robust sensor for the agricultural industry

Our new VC11 and VC12 sensors offer improved EMC performance and a reinforced power supply insulation.

### Sensing distance

Distances from 4 to 12 mm are easily set by means of the multi-turn potentiometer.

### Time delay

VC11 and VC12 are equipped with a time delay which manages delays from 1 to 600 seconds for easy and fast control of the feeding system.

### Wide supply voltage range

Ready for world-wide use, VC11 and VC12 operate on 20.4 to 255 VAC/DC.

### Approvals

CE (EN60947-5-2)  
cULus (UL508) - M24 only



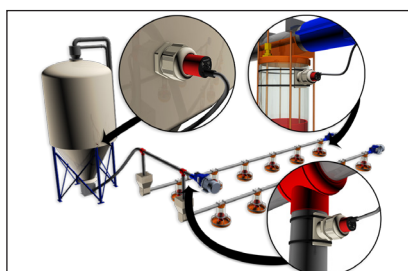
## Applications

### Livestock feeding systems for poultry or pigs

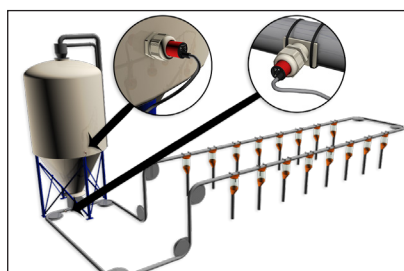
The VC11 and VC12 sensors efficiently control the fodder and seed supply. The sensors detect feed levels in the storage tank and in the feeding line, they control the start and stop of the feeding line, ensuring uniform, simultaneous and precise dosing and providing equal and comfortable access of feed for all birds or pigs.



Straight line feeding system



Circular disc chain feeding system



## The VC11/12 Family

Delay on operate	ON-Delay	<b>VC11RT92410M</b>	<b>VC11RT12010M</b>	<b>VC11RT23010M</b>	<b>VC11RTM2410M</b>
	OFF-Delay	<b>VC12RT92410M</b>	<b>VC12RT12010M</b>	<b>VC12RT23010M</b>	<b>VC12RTM2410M</b>
	No-Delay	<b>VC12RN924</b>	<b>VC12RN120</b>	<b>VC12RN230</b>	<b>VC12RNM24</b>
Rated operating distance (S <sub>n</sub> )	12 mm				
Sensitivity control	4 ... 12 mm, 15 turns potentiometer				
Hysteresis (H)	1.5 mm @ 7 mm				3 .. 20 %
Rated operational voltage (U <sub>a</sub> )	24VAC/DC	120 VAC	230 VAC	20,4 - 255 VAC/VC	
No load supply Power	≤ 1.5 VA				≤ 2.5 VA
Rated Supply frequency	47 to 63 Hz				
Output	Relay SPDT (changeover contacts) 2A @ 249 VAC				
Output Time delay	RT versions: 1s to 10 min., 15 turn potentiometer				
Operation frequency (f)	RN versions: 1 hz				
Led indications	Red LED				
LED indications, additional function	LED flashing depend on time delay				
Degree of protection	IP67				
Ambient temperature	-20 to +70°C (-4 to +158°F)				
Storage temperature	-40 to +85°C (-40 to +185°F)				
CE marking	According to EN 60947-5-2				
Approvals	-				cULus (UL508)
Installation category	III (IEC60664/60664A; 60947-1)				
Pollution degree	3(IEC60664/60664A; 60947-1)				
Sensor protection	Reverse polarity and transients				
Vibration	10 to 150 Hz, (1.0 mm/15G; IEC 60068-2-6)				
Shock	30G /11 ms. 3 positive and 3 negative per axis (IEC 60068-2-6, IEC 60068-2-32)				
Rated insulation voltage	≥ 250 VAC (rms)				
Cable	PCV, grey, 2 m, 5 x 0.75 mm <sup>2</sup> , Ø=7.6 mm				
Housing material, Body	PBT red				
Housing material, Backpart	-				Arnitel, Black
Housing material, Trimmer shaft	-				LCP, White
Dimensions	Ø32 x 125 mm				
Weight incl. packaging	≤ 320 g				
Accessories	Screwdriver				

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