

Capacitive proximity sensors series - Ø6.5 size



Highlights

CAPACITIVE SENSORS

Designed to work in different applications for detection of metallic and non-metallic objects; for control of fluid or solids level in non-transparent bottle or reservoir with or without product contact trough the reservoir material. Capacitive proximity sensors are ideal for level and feed monitoring. From solid material, such as paper or wood, to granules or liquids, they reliably detect the status of the product during the production process and final inspection. These sensors are having high immunity when working in harsh condition of dust, high moisture and other circumstances and widely use in a wide range of industries, such as food and beverage, automotive, printing and packing in conveyor systems.

- Continuous level measurement and temperature measurement
- Measurement irrespective of container material
- Display and intuitive menu navigation
- No mechanical moving parts
- No dead zone along the measuring range
- Rectangular or tubular housing options
- Detects powders, granulates, liquids and solids
- Extremely high electromagnetic compatibility
- High temperature stability versions available
- Hygienic sensors enclosure available

STANDART

All inductive proximity sensors conform to IEC 60947-5-2.

HOUSING MATERIAL

The housing material of sensor including nickel plated copper, stainless steel and plastic with resistance of compression and temperature rapid change. Most of square sensor is plastic housing. These materials can also be used to produce square sensors with adjustable sensing surface or compact (small square) sensors. Such sensors can be used in the occasions of limited installation space or required large detection range.

Application

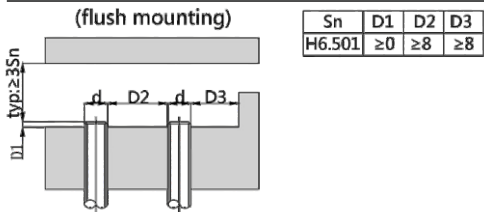
Capacitive proximity switch is a low cost method for non-contact detection of multiple objects types, capacitive sensors is very useful for non contact level switch and many other types applications which is widely used in the following sectors, such as:

- Chemical Industry
- Plastic production industry
- Machine tool sector
- Robot industry
- Conveyor systems
- Paper and printing industry
- Food industry

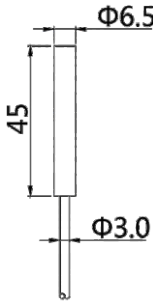

P/N table

Sensing distance	Sn: 1mm		
NPN , NO	VL2C-F6.5N-1NO-2M		
NPN , NC	VL2C-F6.5N-1NC-2M		
PNP , NO	VL2C-F6.5P-1NO-2M		
PNP , NC	VL2C-F6.5P-1NC-2M		

Installation



Product parameters

<div>Features:</div> <ul style="list-style-type: none">Diameter Ø6.5Sensing distance: P/N tableBody material: Stainless steelBuilt-in electric protectionOutput: See P/N tableConnection: PVC cable/2m ; 3*0.18mm²Power supply: 10~30V DC	<div></div> <div>CE</div>	<div></div> <div>CE</div>												
	TECHNICAL INFORMATION													
INDUCTIVE SPECIFICATION														
	Sensing Distance	See P/N table												
	Correction Factor	<table><tr><th>Material</th><th>Factor</th></tr><tr><td>Water</td><td>1</td></tr><tr><td>Alcohol</td><td>0.7</td></tr><tr><td>Ceramic</td><td>0.6</td></tr><tr><td>Glass</td><td>0.5</td></tr><tr><td>Oil</td><td>0.3</td></tr></table>	Material	Factor	Water	1	Alcohol	0.7	Ceramic	0.6	Glass	0.5	Oil	0.3
	Material	Factor												
	Water	1												
	Alcohol	0.7												
Ceramic	0.6													
Glass	0.5													
Oil	0.3													
Mounting	Flush type installation													
Switching Histeresis	< 10%													
ELECTRICAL DATA														
	Operating Voltage	10~30V DC												
	Switching Frequency	100Hz												
	Voltage Drop	≤ 2.0V DC												
	Leakage Current	< 0.01mA												
	Load Current	100 mA												
	Load Current	≤ 10 mA (24v)												
	Hysteresis	< 15% (Sr)												
	Repeatability	< 5.0% (Sr)												
	Temperature Drift	< 10% (Sr)												
	Short Circuit Protection	Yes												
	Overload Protection	Yes												
	Polarity Reversal Protection	Yes												
ENVIRONMENT DATA														
	Ambient Temperature	-25.....70 °C												
	Ingress Protection	IP67												
MECHANICAL DATA														
	Housing Material	Stainless steel												
	Face Material	PBT												
ELECTRICAL CONNECTION DATA														
	Connector	PVC cable/2m ; 2*0.25mm ²												
ACCESORIES														
	Cable	Two meter straight cable (P/N: V5PN-SM8302OF) (available)												
	Cable	Ten meter straight cable (P/N: V5PN-SM8310OF) (available)												
	Connector	M8, 3 PIN, Male type, IP67, Straight, Female, Screw connection (P/N: EAM8MC3001A) (available)												

Input/Output circuit

