

## Capacity Proximity Sensor/Switch Datasheet

### **CCT5-18GM Series Electrostatic Capacity Type**

## **Proximity Switch**

### Introduction

- Capacitive sensors measure the proximity of conductive as well as non-conductive objects with high resolution.
- Analogous to the function of an inductive proximity sensor, a capacitive proximity sensor generates an electrostatic field at the face of the sensor.
- Capacitive proximity sensors can be tuned to detect a wide range of powder, liquid or solid materials.
- It is also possible to detect the presence or absence of materials within a barrier or package when the dielectric of the material is greater than the barrier or packaging.
- Capacitive sensors can also be used as a limit switch, for level detection, object detection and for counting purposes.
- It is divided into two categories according to the working state:
  - NO Normal Open type,
  - NC Normal Close type

#### **Features:**

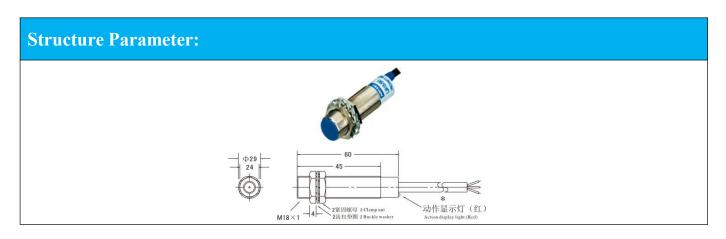
- ◆ Capacitive type, can detect any dielectric
- Power supply reversal connection protection; short-circuit protection, can directly connect with PLC
- Newly added current over-load protection; the elements are made of imported chip
- ◆ Long service life, high reliability and strong resistance property to environment
- Red LED status indicator provides easy-to-view ou tput status.
- Simple operation with adjustable distance.
- The device can be powered by either an AC or DC power source.
- ◆ IP67 protection structure(IEC specification)

Ordering Part Number:					
Model	Detection distance	Switch point function	Working voltage	Connection form	
CCT5-18GM-N1	5mm±10%	NPN NO	DC6-36V	NPN NO  BN  BK  BU  L-	
CCT5-18GM-N2	5mm±10%	NPN NC	DC6-36V	NPN NC  I BN L+  BU L-	
CCT5-18GM-P1	5mm±10%	PNP NO	DC6-36V	PNP NO  I BN L+  BU L-	
CCT5-18GM-P2	5mm±10%	PNP NC	DC6-36V	PNP NC  I BN L+  BU BL	
CCT5-18GM-A1	5mm±10%	AC NO	AC90-250V	AC NO  I BN Z L  BU N	



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CCT5-18GM-A2	5mm±10%	AC NC	AC90-250V	AC NC
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Technical Parameter:					
Rated action distance (Sn)	5mm				
Installation	Flush-mounting				
Reliable movement distance (Sa)	0~4mm				
Switching frequency (f)	50Hz				
Hysteresis (H)	Typical values%				
Reverse polarity protection	Yes				
Short circuit protection	Pulse				
Voltage drop (Ud)	DC≤1V				
Voltage drop (Ud)	AC≤7V				
Working current (I <sub>L</sub> )	0~300 mA				
Leakage current (Ir)	0~0.5mA typical values 0.1uA, 25°C				
No-load current (I <sub>D</sub> )	≤15mA				
Indicator light	Red LED				
environment temperature	-20°C~70°C(248-343K)				
Connection form	2m, PVC				
Conductor cross-sectional area	0.14mm				
Shell material	Brass, Nickel plating				
Induction surface	PBT				
Protection grade	IP65				
Standard	EN 60947-1:2004				

### Remarks:

- Inductive proximity sensors detect the metallic objects.
- The detection distance may fluctuate with the different materials of the detected target. Custom design in the different rated input current and the output voltage are available.





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- Both the configuration parameters and the cable length can be customized. Standard cable length 2M.
- If no explicit requirement for the output polarity, the proximity sensor will be supplied based on NPN mode.

**WARNING:** Incorrect wiring may cause damage to the sensor.