Capacity Proximity Sensor/Switch Datasheet

CCT8-24GM 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 output 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
CCT8-24GM-N1	8mm±10%	NPN NO	DC6-36V	NPN NO
CCT8-24GM-N2	8mm±10%	NPN NC	DC6-36V	NPN NC
CCT8-24GM-P1	8mm±10%	PNP NO	DC6-36V	PNP NO
CCT8-24GM-P2	8mm±10%	PNP NC	DC6-36V	PNP NC
CCT8-24GM-A1	8mm±10%	AC NO	AC90-250V	AC NO

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CCT8-24GM-A2	8mm±10%	AC NC	AC90-250V	
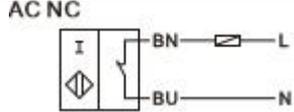
Structure Parameter:
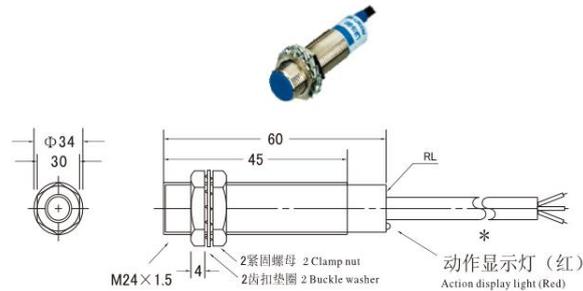
Technical Parameter:

Rated action distance (Sn)	8mm
Installation	Flush-mounting
Reliable movement distance (Sa)	0~7mm
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_L)	0~300 mA
Leakage current (Ir)	0~0.5mA typical values 0.1uA, 25℃
No-load current (I_D)	≤15mA
Indicator light	Red LED
environment temperature	-20℃~70℃(248-343K)
Connection form	2m, PVC
Conductor cross-sectional area	0.14mm
Shell material	Brass, Nickel plating
Induction surface	PBT
Protection grade	IP67
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.

➢ 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.