

Inductive Proximity Sensor/Switch Datasheet

CJM2-12M Series Cylinder-shaped Proximity Sensor

Introduction

- Inductive proximity switch is a device for realizing the non-electrical measurement by inductive winding or the change of coefficient of mutual induction.
- It has high resolution and accuracy for the monitoring and measurement of presence, movement and position of metallic objects.
- The operating distance of the sensor depends on the coil's size as well as the target's shape, size and material.
- It is divided into two categories according to the working state:
 - NO Normal Open type,
 - NC Normal Close type

Features:

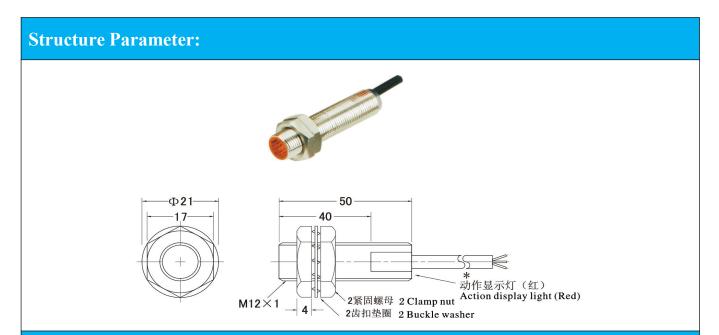
- ◆ Equivalent to the same type of the other brands (P+F and TURCK).
- Power supply reversal connection protection; short-circuit protection, can directly connect with PLC
- ◆ Newly added current over-load protection; the elements are made of imported chip
- ◆ Long service life, high reliability and strong resistance property to environment
- Red LED indicates that it's available to detect the sensor operating state
- ◆ Full thread shape to enlarge the installation space; can use wrench and clamp directly
- ◆ Countermeasure to improve the housing intensity and to solve disconnection
- ◆ IP67 protection structure(IEC specification)

Ordering Part Number:				
Model	Detection distance	Switch point function	Working voltage	Connection form
CJM2-12M-N1	2mm±10%	NPN NO	DC6-36V	NPN NO I BN L+
CJM2-12M-N2	2mm±10%	NPN NC	DC6-36V	NPN NC I BK BU L-
CJM2-12M-N4	2mm±10%	NPN NO+NC	DC6-36V	NPN NO+NC I BN L+
CJM2-12M-P1	2mm±10%	PNP NO	DC6-36V	PNP NO I BK BK BU L-
CJM2-12M-P2	2mm±10%	PNP NC	DC6-36V	PNP NC I BK BL L-
CJM2-12M-P4	2mm±10%	PNP NO+NC	DC6-36V	PNP NO+NC I BK WH BU L-
CJM2-12M-D1	2mm±10%	DC NO	DC10-30V	DC NO I BN L+



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CJM2-12M-D2	2mm±10%	DC NC	DC10-30V	DC NC I BN Z L+
CJM2-12M-A1	2mm±10%	AC NO	AC90-250V	AC NO I BN ──────────────────────────────────
CJM2-12M-A2	2mm±10%	AC NC	AC90-250V	AC NC I BN Z L



Technical Parameter:			
Rated action distance (Sn)	2mm		
Installation	Flush-mounting		
Reliable movement distance (Sa)	0~1.6mm		
Switching frequency (f)	DC 0~500 HZ		
Switching frequency (f)	AC 50/60HZ		
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 °C		
No-load current (I _D)	≤15mA		
Indicator light	Red LED		
environment temperature	-20°C~70°C(248-343K)		
Connection form	2m, PVC		
Conductor cross-sectional area	0.14mm		





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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.
- ▶ 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.