

# Inductive Proximity Sensor/Switch Data Sheet

## CJD-PS17-5D Series DC Cylinder-shaped 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:
  - JK Normal Open type,
  - JB Normal Close type

#### **Features:**

- ◆ Functional type, can be the direct substitution of the same types at home and aboard.
- 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
- ◆ IP67 protection structure (IEC specification)

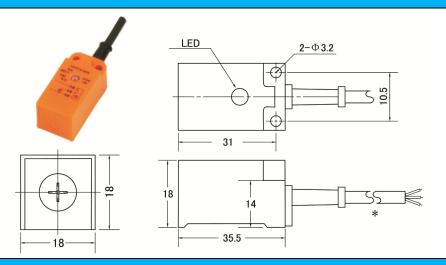
Ordering Part Number:					
Model	Detection distance	Switch point function	Working voltage	Connection form	
CJD-PS17-5DNU	5mm±10%	NPN NO	DC6-36V	NPN NO I BN L+ BK BU L-	
CJD-PS17-5DN2U	5mm±10%	NPN NC	DC6-36V	NPN NC BK BL-L-	
CJD-PS17-5DPU	5mm±10%	PNP NO	DC6-36V	PNP NO I BK BL-L-	
CJD-PS17-5DP2U	5mm±10%	PNP NC	DC6-36V	PNP NC I BN L+	
CJD-PS17-5D1U	5mm±10%	DC NO	DC10-30V	DC NO I BN — L+	
CJD-PS17-5D2U	5mm±10%	DC NC	DC10-30V	DC NC I BN L+	
CJD-PS17-5A1U	5mm±10%	AC NO	AC90-250V	AC NO I BN DL N	
CJD-PS17-5A2U	5mm±10%	AC NC	AC90-250V	AC NC I BN BL N	





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### **Structure Parameter:**



# Technical Parameter: Rated action distance (Sn) Installation Reliable movement distance (Sn) Upper detection 0~4mm

Installation	Upper detection		
Reliable movement	0~4mm		
distance (Sa)			
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 <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	0.14mm		
area			
Shell material	PBT		
Induction surface	PBT		
Protection grade	IP67		

Standard

EN 60947-1:2004



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#### 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 1.5M.
- If no explicit requirement for the output polarity, the proximity sensor will be supplied based on NPN mode
- ➤ Please state the full part number on the order, such as LJK-M-D2N II.

WARNING: Incorrect wiring may cause damage to the sensor.

