

# Inductive sensor PL-05N, NO/NPN 10-30VDC

## Product codes:

Reference: AM9051

EAN13: -

UPC: 85365080

## Product features:

Voltage: 10-30 V DC

Output current: 150 mA

Cable length: 100 cm

Frequency: 800 Hz

Waterproof grade: IP67

Operating temperature: -25 °C - +80 °C

Output type: PNP

Output function: NO



## Product attributes:

## Product description:

The PL-05N inductive sensor is a non-contact sensor designed for detecting metal objects in industrial and automation applications. The design with a rectangular body allows for fixed mounting in structures and machine units. The sensor is equipped with a 100 cm cable and is suitable for tasks where output switching is required when approaching a metal target without mechanical contact.

## Technical specifications

- Model: PL-05N
  - Product type: inductive proximity sensor
  - Design: long square body
  - Output state: NO
  - Output method: NPN
  - Sensing distance: 5.0 mm
  - Mounting method: flush mounting
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- Scanning direction: horizontal
- Supply voltage: 10 to 30 V DC
- Response: 800 Hz
- Protection: IP67
- Operating temperature: -25 to +80 °C
- Operating humidity: 35 to 95% RH
- Maximum output current: 150 mA
- Maximum current consumption: 10 mA
- Residual voltage: less than 0.1 V
- Wire terminal: brown +10 to 30 V DC, blue 0 V, black output
- Protection circuits: short circuit and reverse polarity protection
- Body dimensions: 17 x 17 x 35 mm
- Cable length: 100 cm

### **Functions and features**

- Non-contact inductive detection of metal objects.
- Rectangular body with mounting holes for secure mounting.
- LED status indication on the sensor body.
- Three-wire DC design with NPN transistor output.
- Recessed design for installation flush with the mounting element.
- IP67 rated design for use in industrial environments.

### **Ideal for**

- Detection of the position of metal parts in machines and automation lines.
- Sensing the presence of metal parts in feeders, fixtures and conveyors.
- End and position sensing in industrial applications.
- Integration into control systems operating with DC power supply and NPN inputs.

### **Package contents**

- Inductive sensor PL-05N with connection cable 100 cm

### **Why choose this product?**

- Specifically designed electrical connections and a known output type facilitate integration into control circuits.
  - The recessed design and compact square body support installation in limited spaces.
  - IP67 protection and built-in protection circuits expand the possibilities of use in industrial operations.
  - Fast response is suitable for sensing in applications with a higher frequency of state changes.
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## Installation and operating instructions

- Follow the wire connection according to the sensor terminals: brown wire power supply, blue wire 0 V, black wire output.
- Install the sensor in accordance with the required mounting method for flush mounting.
- During installation, ensure mechanical stability and protection of the cable against tension, breakage and abrasion.
- Before commissioning, verify the compatibility of the NPN output with the input of the downstream device.

## Safety notice

- Only perform installation and connection when the power supply is disconnected.
- Incorrect wiring can lead to damage to the sensor or the connected control system.
- Observe the specified DC supply voltage and do not exceed the maximum output load.
- Installation into electrical and control equipment should be carried out by a person with appropriate professional qualifications.

## Product gallery:

