

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

Product codes:

Reference: AM6544

EAN13: -

UPC: 85365080

Product features:

Voltage: 10-30 V DC

Output current: 150 mA

Cable length: 200 cm

Frequency: 800 Hz

Waterproof grade: IP67

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

Output type: NPN

Output function: NO



Product attributes:

Product description:

The PS SP-05N series inductive proximity sensor is a non-contact sensor for detecting metal objects in industrial and automation applications. The board design with mounting holes allows for a firm attachment to the structure of the machine or device. The sensor is designed for DC power supply and uses an NPN output in the NO version.

Technical specifications

- Product line: PS Series Inductive Proximity Sensor
 - Model: SP-05N
 - Design type: plate type, plate design
 - Sensing principle: inductive proximity sensor
 - Output method: NPN
 - Output state: NO
 - Sensing distance: 5.0 mm
 - Mounting method: flush
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- Scanning direction: vertical
- Supply voltage: 10 to 30 VDC
- Maximum output current: 150 mA
- Maximum current consumption: 10 mA
- Residual voltage: less than 0.1 V
- Leakage current: less than 0.8 mA
- Hysteresis: less than 10% of the sensing distance
- Temperature drift: less than 10 μm per $^{\circ}\text{C}$
- Voltage drift: less than 1 μm per V
- Protection circuit: short circuit and reverse polarity protection
- Working temperature: -25°C to $+80^{\circ}\text{C}$
- Operating humidity: 35% to 95% RH
- Protection: IP67
- Response frequency: 800 Hz
- Body dimensions: 30.5 x 17.5 x 10.0 mm
- Cable length: 200 cm
- Connection: cable outlet

Functions and features

- Non-contact detection of metal objects without mechanical wear of the sensing part.
- Board housing with mounting holes for fixed mounting.
- Recessed sensing design for installation in a metal environment according to the manufacturer's installation conditions.
- Three-wire DC connection with NPN output.
- IP67 rated design for use in industrial environments.

Ideal for

- Detection of the position of metal parts of machines and mechanisms.
- Sensing the presence of metal parts in automation lines.
- Industrial control systems, fixtures and production equipment.
- Applications where a compact, flat sensor design is required.

Package contents

- Inductive proximity sensor PS series SP-05N with cable

Why choose this product?

- Clearly defined electrical and mechanical parameters for DC applications.
 - Compact panel design for installation in limited space.
 - NPN NO output suitable for common industrial control inputs.
 - Short circuit and reverse polarity protection increases wiring durability.
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- IP67 protection allows for use in more demanding operating environments.

Installation and operating instructions

- When connecting, follow the wiring diagram for the DC version: brown wire for positive power supply, blue wire for negative pole, black wire as output.
- Perform the installation taking into account the recessed design of the sensor and the sensing direction.
- The power supply and the load input circuit must match the sensor parameters.
- Before commissioning, verify correct polarity and output connection.

Safety notice

- Incorrect wiring may cause damage to the sensor or connected equipment.
- Disconnect the power supply during assembly and connection.
- Do not exceed the permitted supply voltage and maximum output current.
- Installation in industrial equipment should be carried out by a person with knowledge of the relevant electrical wiring.
- Do not subject the cable to excessive tension, kinking or mechanical damage.

Product gallery:

