

Inductive sensor SP-05NB, NC/NPN 10-30VDC

Product codes:

Reference: AM2802

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: NC



Product attributes:

Product description:

SP-05NB is a board-mounted inductive proximity sensor for non-contact detection of metal objects. It is intended for installation in fixed mechanical assemblies where output switching is required when the set sensing distance is reached. The design with a cable and a rectangular body with mounting holes facilitates installation in machines, fixtures and automation units.

Technical specifications

- Model: SP-05NB
 - Series: PS Series Inductive Proximity Sensor
 - Design type: plate type, plate design
 - Output method: NPN
 - Output state: NC
 - Sensing distance: 5.0 mm
 - Mounting method: flush
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- Scanning direction: vertical
- Supply voltage: 10–30 VDC
- Response: 800 Hz
- Maximum output current: 150 mA
- Maximum current consumption: 10 mA
- Residual voltage: less than 0.1 V
- Power ripple arrester: less than 20% Vp-p
- Hysteresis: less than 10% of the sensing distance
- Thermal drift: less than 10 µm per °C
- Voltage drift: less than 1 µm per V
- Protection circuits: short circuit and reverse polarity protection
- Working temperature: -25 °C to +80 °C
- Operating humidity: 35% to 95% RH
- Protection: IP67
- Sensing surface color for NPN: red
- Body dimensions: 30.5 × 18.0 mm
- Body length without cable: 10.0 mm
- Cable length: 200 cm
- Mounting holes: 2 holes

Functions and features

- Non-contact inductive detection of metal objects without mechanical wear of the sensing part.
- Rectangular plate design suitable for fastening with screws.
- Recessed sensor design for mounting flush with the surrounding material.
- NC output for applications where a closed state in the rest position is required.
- Three-wire DC connection according to the diagram for the NPN variant.
- Cable outlet from the sensor body for fixed connection in the installation.
- IP67 protection for use in industrial environments.

Ideal for

- Detection of metal parts in automation technology.
- Position control in fixtures, conveyors and machinery.
- End and presence sensing in industrial applications.
- Installations with limited mounting space where a cylindrical sensor design is not suitable.

Package contents

- Inductive proximity sensor SP-05NB with cable.

Why choose this product?

- Verified technical parameters for DC power supply 10–30 V.
- Combination of plate body, flush mounting and vertical sensing for precise mechanical integration.
- NC NPN version for specific requirements of control and signaling circuits.
- Integrated short-circuit and reverse polarity protection increases wiring durability.
- IP67 protection and a wide operating temperature range support use in industrial operations.

Installation and operating instructions

- Follow the wiring diagram for the NPN DC sensor.
- Install the sensor as a flush-mounted type to maintain the declared sensing properties.
- The supply voltage must be within the range of 10–30 VDC.
- Connect the load in accordance with the NPN output connection and do not exceed the maximum output current.
- During installation, ensure mechanical stability and protection of the cable against pulling, bending and damage.

Safety notice

- The product is an electrical sensor designed for properly designed DC circuits.
- Incorrect wiring may lead to sensor damage, short circuit or output failure.
- Perform installation and connection with the power disconnected.
- When installing in an industrial facility, ensure protection against mechanical damage to the cable and sensor body.
- Professional installation is especially suitable for connection to control systems and machinery.

Product gallery:

