

Inductive sensor SP-05PB, NC/PNP 10-30VDC

Product codes:

Reference: AM0139

EAN13: -

UPC: 85365080

Product features:

Voltage: 10-30 V DC

Output current: 150 mA

Cable length: 200 cm

Frequency: 80 Hz

Waterproof grade: IP67

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

Output type: PNP

Output function: NC



Product attributes:

Product description:

The FOTEK SP-05PB inductive proximity sensor is a non-contact sensor designed for the detection of metal objects in automation and machine applications. The flat body design allows for fixed mounting in structures and equipment where repeatable detection at short distances is required. The sensor is designed for DC power supply and uses a PNP transistor output.

Technical specifications

- Model: FOTEK SP-05PB
 - Product line: PS Series Inductive Proximity Sensor
 - Sensor type: inductive proximity sensor
 - Design: plate type, plate design
 - Output method: PNP
 - Output state: NC
 - Sensing distance: 5.0 mm
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- Mounting method: flush
- 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
- Power supply ripple: less than 20% Vp-p
- Hysteresis: less than 10% of the sensing distance
- Temperature drift: less than 10 µm per °C
- Voltage drift: less than 1 µm per V
- Protection circuit: short circuit and reverse polarity protection
- Working temperature: -25 °C to +80 °C
- Operating humidity: 35% to 95% RH
- Protection: IP67
- Response frequency: 800 Hz
- Body dimensions: 30.5 × 17.5 × 10.0 mm
- Body length in side view: 18.0 mm
- Wire connection: brown +10 to 30 VDC, blue 0 V, black output

Functions and features

- Non-contact inductive detection of metal objects without mechanical wear.
- Flat housing for mounting on a flat surface of the device or in a structural unit.
- Recessed sensor design for installation in a metal environment according to the manufacturer's installation conditions.
- Transistor PNP output in NC version.
- Three-wire connection for DC power supply and output signal.
- Short circuit and reverse polarity protection increases wiring durability.
- IP67 protection allows use in industrial environments with increased demands for dust and water resistance.

Ideal for

- Position detection of metal parts in machines and automation systems.
- Sensing the presence of metal parts on fixtures, sliding mechanisms and conveyors.
- End and reference sensing in industrial equipment.
- Integration into control systems working with PNP inputs.

Package contents

- Inductive proximity sensor FOTEK SP-05PB with connection cable.

Why choose this product?

- A clearly designated model with a verifiable designation SP-05PB.
- Combination of board design, flush mounting and PNP NC output for industrial sensing tasks.
- The listed electrical and operating parameters correspond to the product line specification for the DC variant and the dimensional table for the SP-05PB model.
- Protective circuits and IP67 protection support deployment in technical applications requiring operational durability.

Installation and operating instructions

- When connecting, follow the wiring diagram: brown to the positive power pole, blue to 0 V, black as output.
- Observe the flush mounting method corresponding to the sensor design.
- Before commissioning, verify the compatibility of the PNP NC output with the input of the master device.
- Carry out the installation taking into account the sensing direction and working distance of the sensor.

Safety notice

- Incorrect wiring may result in damage to the sensor or the connected control system input.
- Disconnect the power during installation.
- Prevent short-circuiting the output wire and exceeding the permitted output current.
- Installation into industrial equipment should be performed by a person with knowledge of electrical circuits and control inputs.

Product gallery:

