



DENKI SEIGYO

DSP17 Series Square Inductive Proximity Sensor



Models

DSP17-8DP (PNP NO)
DSP17-8DN (NPN NO)

Product Overview

The Denki Seigyo DSP17 Series Square Inductive Proximity Sensors are designed for reliable **non-contact detection of metallic objects** in industrial automation environments.

These compact **17 mm square sensors** provide stable sensing performance with excellent resistance to electrical noise, making them ideal for use in **automation machines, conveyors, packaging equipment, and positioning systems**.

The sensors feature **8 mm sensing distance**, durable **ABS housing**, and **IP67 protection**, ensuring reliable operation even in demanding industrial environments.

Features

- Compact **17 mm square housing**
- **8 mm sensing distance**
- **High noise immunity**
- **LED operation indicator**
- Built-in **short-circuit protection**
- **Reverse polarity protection**
- Durable **heat-resistant ABS body**
- Protection rating **IP67**
- Reliable performance in harsh industrial environments



Model Configuration

Model	Output Type	Operation Mode
DSP17-8DP	PNP	Normally Open
DSP17-8DN	NPN	Normally Open

Specifications

Parameter	Specification
Sensor Type	Inductive Proximity Sensor
Housing Type	Square
Frame Size	17 mm
Sensing Distance	8 mm
Standard Target	25 × 25 × 1 mm (Iron)
Supply Voltage	12 – 24 V DC
Output Type	PNP / NPN
Output Mode	Normally Open
Response Frequency	200 Hz
Current Consumption	Max. 10 mA
Load Current	Max. 200 mA
Residual Voltage	≤ 3.5 V
Protection Circuit	Reverse polarity, Short circuit protection
Protection Rating	IP67
Housing Material	Heat-resistant ABS
Cable Length	2 m
Ambient Temperature	–25°C to +70°C
Storage Temperature	–30°C to +80°C
Indicator	Red LED

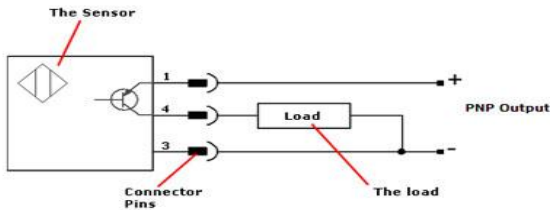
Dimensions

Parameter	Value
Housing Size	17 × 17 × 36 mm
Mounting	Screw mounting
Weight	Approx. 70 g

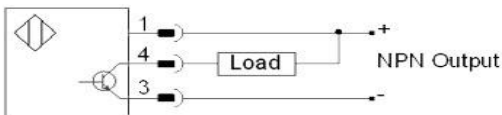


Wiring Diagram

PNP 3-wire Standard Diagram



NPN 3-wire Standard Diagram



Applications

Denki Seigyo square proximity sensors are widely used in:

- Industrial automation
- Conveyor systems
- Packaging machinery
- Assembly lines
- Machine tools
- Robotics
- Position detection

Ordering Information

Model	Output Type	Sensing Distance	Connection
DSP17-8DN	NPN NO	8 mm	Cable
DSP17-8DP	PNP NO	8 mm	Cable



Key Advantages

- Long sensing distance
- High reliability and stability
- Built-in surge protection
- LED operation indicator
- Short circuit protection
- Robust metal housing
- IP67 protection for harsh environments

Typical Applications

- Industrial automation systems
 - Packaging machines
 - Conveyor systems
 - Robotics
 - Machine tools
 - Position detection
 - Metal part detection
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