

# Rectangular Inductive Long-Distance Proximity Sensors



## AS Series (DC 4-wire)

### CATALOG

For your safety, read and follow the considerations written in the instruction manual, other manuals and Autonics website.

The specifications, dimensions, etc. are subject to change without notice for product improvement. Some models may be discontinued without notice.

#### Major Features

- Excellent noise immunity with specialized sensor IC
- Built-in surge protection circuit, output short over current protection circuit, reverse polarity protection
- Power supply : 12-48 VDC $\equiv$  (operating voltage : 10-65 VDC $\equiv$ )
- Simultaneous output (Normally Open + Normally Closed)
- Power indicator (green LED) and operation indicator (red LED)
- IP67 protection structure (IEC standard)

#### Ordering Information

This is only for reference.

For selecting the specific model, follow the Autonics web site.

**AS 80 - 50 D ①**

#### ① Control output

N3: NPN Normally Open + Normally Closed

P3: PNP Normally Open + Normally Closed

#### Product Components

- Bracket × 1
- M5 Bolt × 4

#### Specifications

Installation	Upper side type
Model	AS80-50D□
Sensing side length	80 mm
Sensing distance	50 mm
Setting distance	0 to 35 mm
Hysteresis	≤ 15 % of sensing distance
Standard sensing target: iron	150 × 150 × 1 mm
Response frequency <sup>01)</sup>	30 Hz
Affection by temperature	± 10 % for sensing distance at ambient temperature 20 °C
Indicator	Power indicator (green), operation indicator (yellow)
Approval	CE EAC
Unit weight	≈ 470 g

01) The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

Power supply	12-48 VDC $\equiv$ (ripple P-P: ≤ 10 %), operating voltage: 10-65 VDC $\equiv$
Current consumption	≤ 20 mA
Control output	≤ 200 mA
Residual voltage	≤ 2 V
Protection circuit	Surge protection circuit, output short over current protection circuit, reverse polarity protection
Insulation type	≥ 50 MΩ (500 VDC $\equiv$ megger)
Dielectric strength	1,500 VAC ~ 50/60 Hz for 1 minute
Vibration	1 mm amplitude at frequency 10 to 55 Hz (for 1 min) in each X, Y, Z direction for 2 hours
Shock	500 m/s <sup>2</sup> (≈ 50 G) X, Y, Z directions for 3 times
Ambient temperature	-25 to 70 °C, storage: -30 to 80 °C (non-freezing or non-condensation)
Ambient humidity	35 to 95 %RH, storage: 35 to 95 %RH (non-freezing or non-condensation)
Protection structure	IP67 (IEC standards)
Connection	Cable type model
Wire spec.	∅ 5 mm, 4-wire, 2 m
Connector spec.	AWG 22 (0.08 mm, 60-wire), insulator diameter: ∅ 1.25 mm
Material	Case: PC+ABS, standard type cable (black): polyvinyl chloride (PVC)

## Dimensions

- Unit: mm, For the detailed dimensions of the product, follow the Autonics web site.

**A** Tap hole

