

# Rectangular Inductive Proximity Sensors



## PFI Series (DC 3-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.

#### Features

- Flat, compact design (10 mm height) allows easy installation in limited spaces
- Excellent noise immunity with specialized sensor IC
- Built-in surge protection circuit, output short over current protection circuit, reverse polarity protection
- Operation indicator (red LED)
- Durable and reliable alternative to micro switches and limit switches
- IP67 protection structure (IEC standard)

#### Ordering Information

This is only for reference.

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

**PFI 25 - 8 D ①**

#### ① Control output

N: NPN Normally Open

N2: NPN Normally Closed

P: PNP Normally Open

P2: PNP Normally Closed

#### Product Components

- M3 Bolt × 2

#### Specifications

Installation	Upper side type
Model	PFI25-8D□
Sensing side length	25 mm
Sensing distance	8 mm
Setting distance	0 to 5.6 mm
Hysteresis	≤ 10 % of sensing distance
Standard sensing target: iron	25 × 25 × 1 mm
Response frequency <sup>01)</sup>	200 Hz
Affection by temperature	≤ ± 10 % for sensing distance at ambient temperature 20 °C
Indicator	Operation indicator (red)
Approval	CE EAC
Unit weight	≈ 70 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	12-24 VDC= (ripple P-P: ≤ 10 %), operating voltage: 10-30 VDC=
Current consumption	≤ 10 mA
Control output	≤ 200 mA
Residual voltage	≤ 1.5 V
Protection circuit	Surge protection circuit, output short over current protection circuit, reverse polarity protection
Insulation type	≥ 50 MΩ (500 VDC= megger)
Dielectric strength	1,500 VAC~ 50/60 Hz for 1 min
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) in each X, Y, Z direction 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.	Ø 4 mm, 3-wire, 2 m
Connector spec.	AWG 22 (0.08 mm, 60-wire), insulator diameter: Ø 1.25 mm
Material	Case: PPS, standard type cable (black): polyvinyl chloride (PVC)

#### Dimensions

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

