

Flat type proximity sensor

■ Features

- Easy to mount in narrow space by Flat structure (Height: 10mm)
- Improved the noise resistance with dedicated IC (DC)
- Reverse power polarity (DC), surge (AC/DC), overcurrent protection (DC)
- Red LED status indication
- IP67 rated waterproof structure (IEC standard)
- Replacer for micro switches and limit switches



Please read "Caution for your safety" in operation manual before using.



■ Type

◎ DC 3-wire type

Appearance	Model
	PFI25-8DN
	PFI25-8DP
	PFI25-8DN2 ※
	PFI25-8DP2 ※

▶ "※" mark can be customized.

◎ AC 3-wire type

Appearance	Model
	PFI25-8AO
	PFI25-8AC

■ Specification

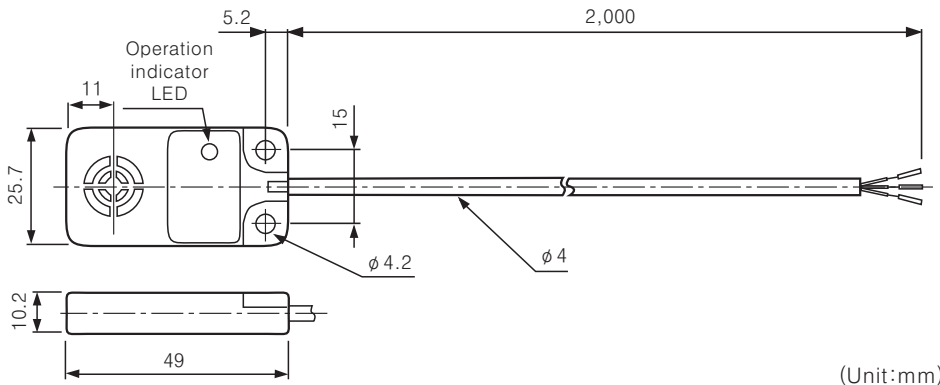
Model	PFI25-8DN PFI25-8DP PFI25-8DN2 PFI25-8DP2	PFI25-8AO PFI25-8AC
Sensing distance	8mm ±10%	
Hysteresis	Max. 10% of sensing distance	
Standard sensing target	25×25×1mm (Iron)	
Setting distance	0 ~ 5.6mm	
Power supply (Operating voltage)	12-24VDC (10-30VDC)	100-240VDC (85-264VAC)
Current/Leakage consumption	Max. 10mA	Max. 2.5mA
Response frequency(*1)	200Hz	20Hz
Residual voltage	Max. 1.5V	Max. 10V
Affection by Temp.	±10% Max. for sensing distance at +20°C within temperature range of -25 ~ +70°C	
Control output	Max. 200mA	Max. 150mA
Insulation resistance	Min. 50MΩ (at 500VDC mega)	
Dielectric strength	1500VAC 50/60Hz for 1 minute	2500VAC 50/60Hz for 1 minute
Vibration	1mm amplitude at frequency of 10 ~ 55Hz in each of X, Y, Z directions for 2 hours	
Shock	500m/s ² (50G) in X, Y, Z direction for 3 times	
Indicator	Operation indicator (Red LED)	
Ambient temperature	-25 ~ +70°C (at non-freezing status)	
Storage temperature	-30 ~ +80°C (at non-freezing status)	
Ambient humidity	35 ~ 95%RH	
Protection circuit	Surge, Reverse power polarity, Overcurrent protection circuit	Surge protection circuit
Cable	∅4×3P, 2m	∅4×2P, 2m
Protection	IP67 (IEC standard)	
Approval		
Unit weight	Approx. 80g	

※ (*1) 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.

- (A) Counter
- (B) Timer
- (C) Temp. controller
- (D) Power controller
- (E) Panel meter
- (F) Tacho/Speed/Pulse meter
- (G) Display unit
- (H) Sensor controller
- (I) Switching power supply
- (J) Proximity sensor
- (K) Photo electric sensor
- (L) Pressure sensor
- (M) Rotary encoder
- (N) Stepping motor & Driver & Controller
- (O) Graphic panel
- (P) Field network device
- (Q) Production stoppage models & replacement

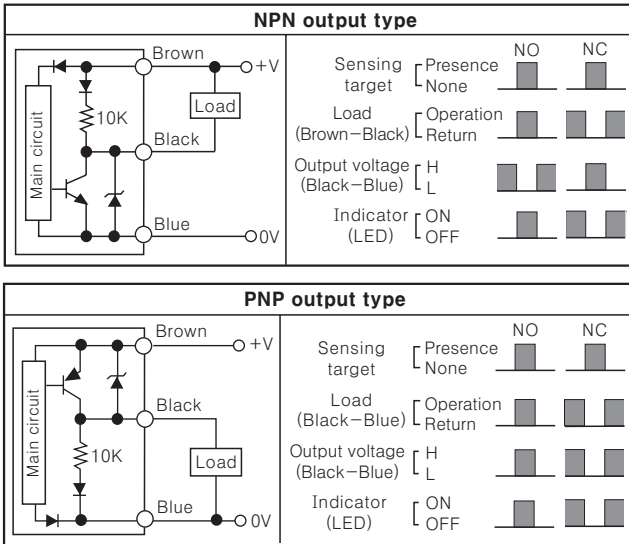
PFI Series

Dimensions

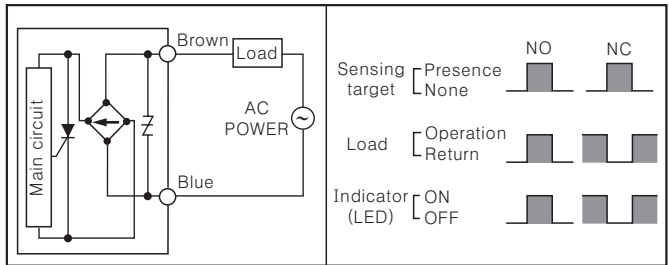


Control output diagram

DC 3-wire type



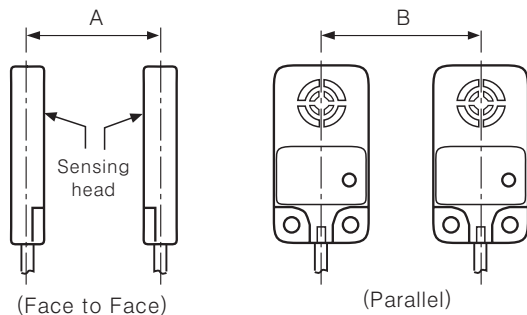
AC 2-wire type



Proper usage

Mutual-interference

When several proximity sensors are mounted closely, sensors may cause a malfunction due to mutual interference. Therefore, be sure to provide a minimum distance between the two sensors, as below chart.

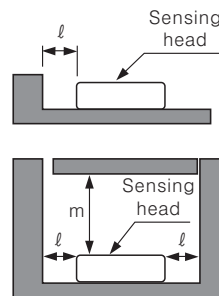


A	100
B	80

(Unit:mm)

Influence by surrounding metals

When sensors are mounted on metallic panel, it may cause malfunction affected by any metallic object except target. Therefore, be sure to provide a minimum as below chart.



When the height between the proximity sensor and surrounding metals is same.

When the height between the proximity sensor and surrounding metals is different.

l	5
m	15

(Unit:mm)