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, surge, overcurrent protection
- Red LED status indication
- IP67 rated waterproof structure (IEC standard)
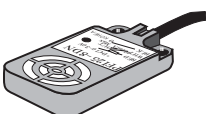- Replacer for micro switches and limit switches

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

CE

▣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℃ within temperature range of −25 ~ +70℃	
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/s² (50G) in X, Y, Z direction for 3 times	
Indicator	Operation indicator (Red LED)	
Ambient temperature	−25 ~ +70℃ (at non−freezing status)	
Storage temperature	−30 ~ +80℃ (at non−freezing status)	
Ambient humidity	35 ~ 95%RH	
Protection circuit	Surge, Reverse poewer polarity, Overcurrent protection circuit	Surge protection circuit
Cable	φ4×3P, 2m	φ4×2P, 2m
Protection	IP67 (IEC standard)	
Approval	CE	
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.

PFI Series

▣ Dimensions

(Unit:mm)
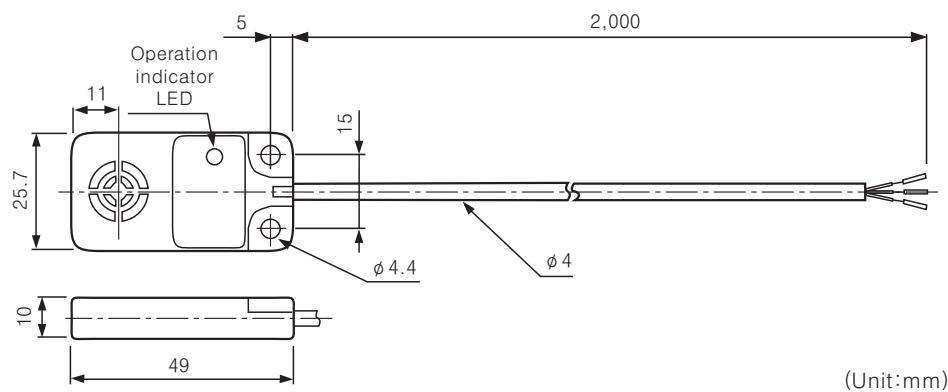
▣ Control output diagram

◎ DC 3-wire type

NPN universal output type

		NO	NC
Sensing target	Presence / None		
Load (Brown−Black)	Operation / Return		
Output voltage (Black−Blue)	H / L		
Indicator (LED)	ON / OFF		

PNP universal output type

		NO	NC
Sensing target	Presence / None		
Load (Black−Blue)	Operation / Return		
Output voltage (Black−Blue)	H / L		
Indicator (LED)	ON / OFF		

◎ AC 2-wire type

		NO	NC
Sensing target	Presence / None		
Load	Operation / Return		
Indicator (LED)	ON / OFF		
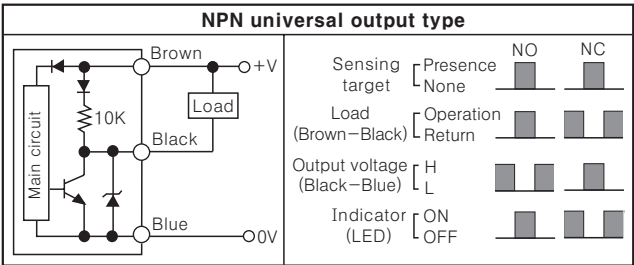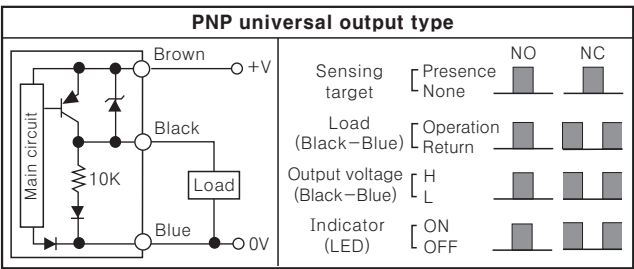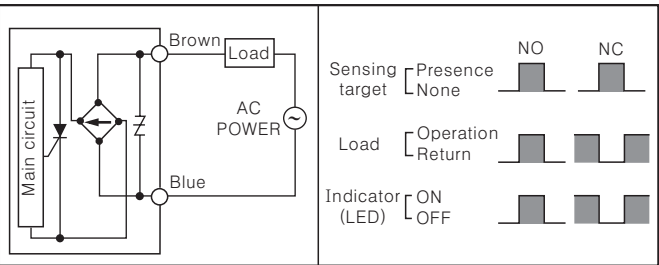
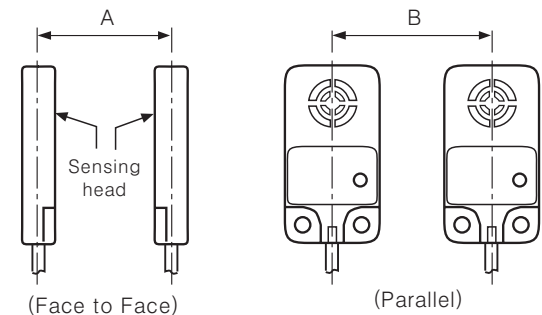## ▣ Proper usage

◎ 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.
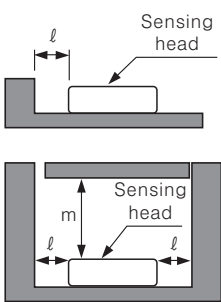

(Face to Face)   (Parallel)

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)