Flat type proximity sensor

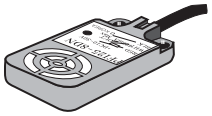
▣Features

- Easy to mount in narrow space by Flat structure(Height:10mm)
- Improve the noise resistance by adopting dedicated IC(DC)
- Built-in protection circuit of reverse power polarity, surge protection, overcurrent protection circuit
- Drive the load of 200mA directly within range of 12-24VDC power supply
- Available to check the status of operation by Red LED indicator
- Waterproof structure by IP67(IEC standard)
- Wide range of applications for replacement of micro switch, limit switch

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

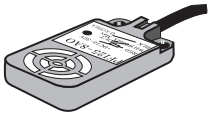
▣Type

◎DC 3-wire type

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

▶※ Mark is optional.

◎AC 3-wire type

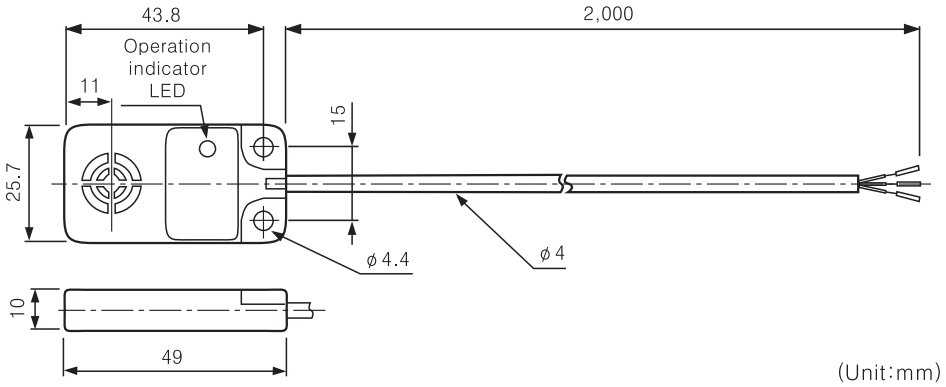
Appearance	Model
	**PFI25-8AO**
	PFI25-8AC

▣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. 5~150mA
Insulation resistance	Min. 50MΩ(at 500VDC)	
Dielectric strength	1500VAC 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 protection circuit, Reverse polarity protection, Overload & short circuit protection	Surge protection circuit
Cable	φ4×3P, 2m	φ4×2P, 2m
Protection	IP67(IEC standard)	
Approval	CE	
Unit weight	Approx. 60g	Approx. 67g

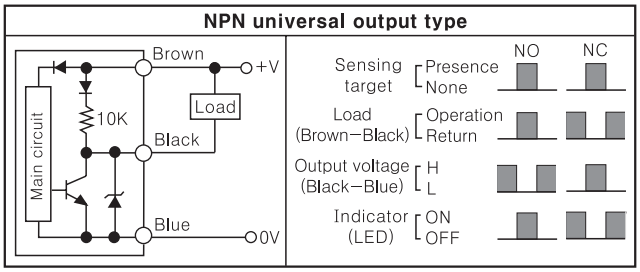
※**(*1)** The response frequency is the average value. The standard sensing target is used and the width is set as 2 times of the standard sensing target, 1/2 of the sensing distance for the distance.

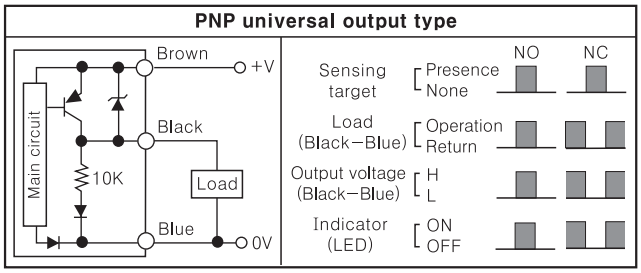
▣Dimensions



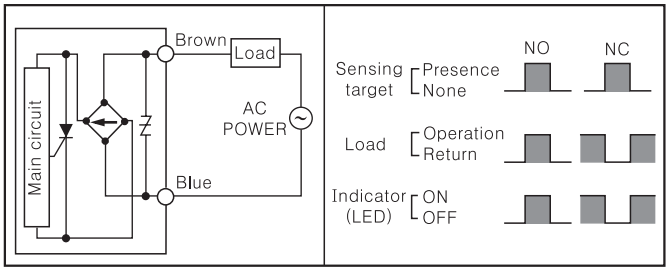
▣Control output diagram

◎DC 3-wire type





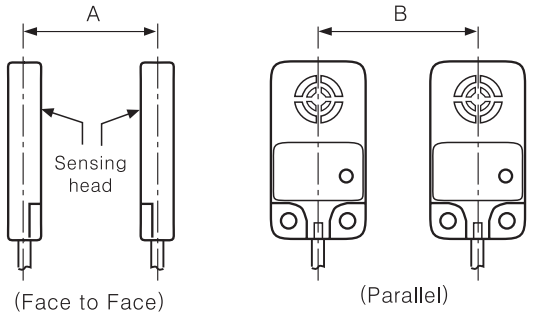
◎AC 2-wire type



▣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.

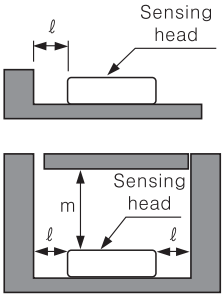


A	100
B	80

(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)