

Flat type proximity sensor

■ Features

- Easy to mount in narrow space by Flat structures (Height: 10mm)
- Enhanced noise-resistance by using exclusive IC (DC power)
- Reverse polarity protection, Surge protection function
- Able to check the status of operation by Red LED indicator
- Wide range of applications, for replacement of Micro switch, Limit switch.
- Driving the load of 200mA directly within range of 10–30VDC power source. (Resistive load)
- Water proof structure by IP 67 (IEC specification)



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

■ Type

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

▶ ※ Mark is optional.

■ Specifications

Model	PFI25-8DN PFI25-8DP PFI25-8DN2 PFI25-8DP2
Detecting distance	8mm ±10%
Hysteresis	Max. 10% of detecting distance
Standard detecting target	25×25×1mm (Iron)
Setting distance	0 ~ 5.6mm
Power supply (Operating voltage)	12–24VDC (10–30VDC)
Current consumption	Max. 10mA
Response frequency	200Hz
Residual voltage	Max. 1.5V
Affection by Temp.	±10% Max. of detecting distance at +20°C within temperature range of –25 ~ +70°C
Control output	200mA
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/s ² (50G) in X, Y, Z directions 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 protection circuit, Reverse polarity protection, Overload & short circuit protection
Protection	IP67 (IEC specification)
Weight	Approx. 80g

(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)
Proximity
sensor

(J)
Photo
electric
sensor

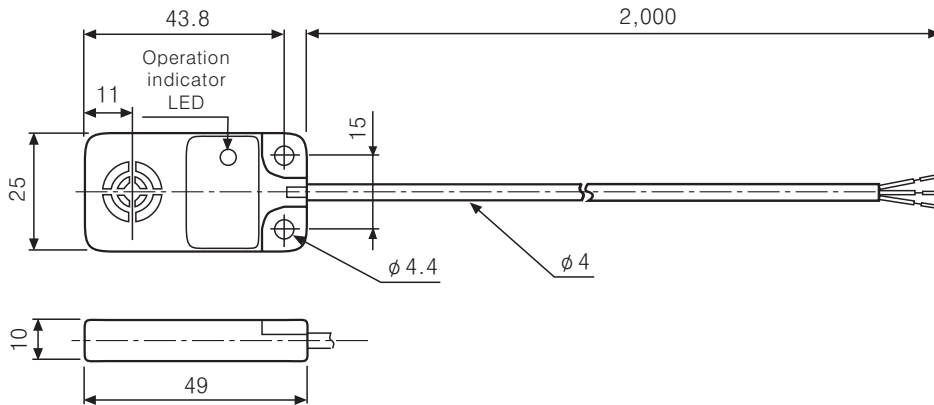
(K)
Pressure
sensor

(L)
Rotary
encoder

(M)
5-Phase
stepping
motor &
Driver &
Controller

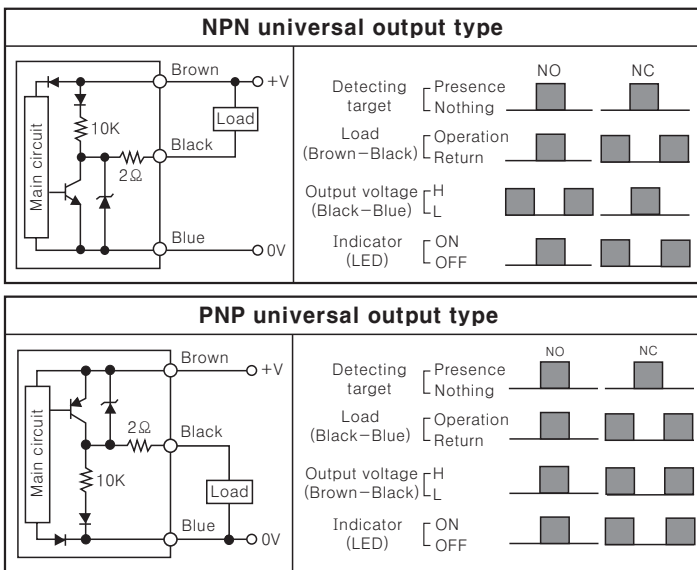
PFI Series

Dimensions

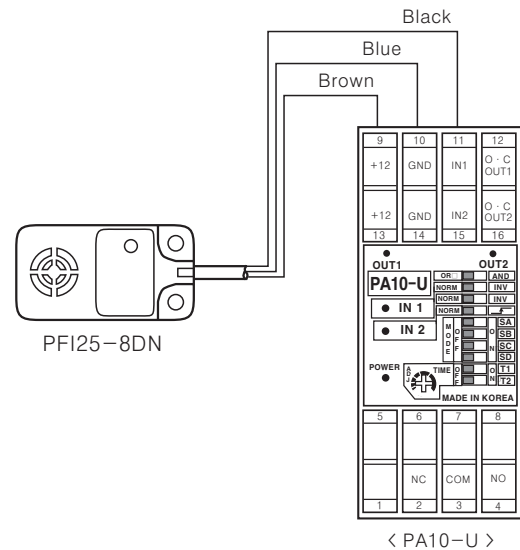


Unit:mm

Control output diagram



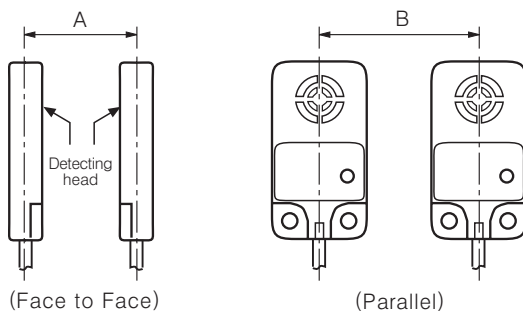
Connections



Proper usage

○Mutual-interference

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

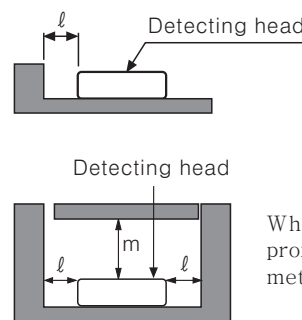


A	100
B	80

Unit:mm

○Influence by surrounding metals

When sensors are mounted on metallic panel, you must prevent sensors from being 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 the same.

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

l	5
m	15

Unit:mm