

PSN SERIES

Square Inductive Proximity Sensors

■ Features



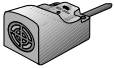
- > Surge Protection□
- > Reverse Polarity Protection□
- > Short Circuit Protection□
- > LED Output Indicator□
- > 2 Meter PVC Cable□
- > IP67 Environmental Protection□
- > All Plastic Body






■ Type

DC 3-Wire Switching 10 - 30V DC

AC 2-Wire Switching 90 - 250V AC

Appearances	Model
25 square 	PSN25-5DN
	PSN25-5DP
	PSN25-5DN2
	PSN25-5DP2
30 square 	PSN30-10DN
	PSN30-10DP
	PSN30-10DN2
	PSN30-10DP2
	PSN30-15DN
	PSN30-15DP
	PSN30-15DN2
	PSN30-15DP2
40 square 	PSN40-20DN
	PSN40-20DP
	PSN40-20DN2
	PSN40-20DP2

Appearances	Model
25 square 	PSN25-5AO
	PSN25-5AC
	PSN30-10AO
30 square 	PSN30-10AC
	PSN30-15AO
	PSN30-15AC
40 square 	PSN40-20AO
	PSN40-20AC

Specifications: DC 3-Wire Switching

Model	PSN25-5DN PSN25-5DP PSN25-5DN2 PSN25-5DP2	PSN30-10DN PSN30-10DP PSN30-10DN2 PSN30-10DP2	PSN30-15DN PSN30-15DP PSN30-15DN2 PSN30-15DP2	PSN40-20DN PSN40-20DP PSN40-20DN2 PSN40-20DP2
Detecting distance	5mm ±10%	10mm ±10%	15mm ±10%	20mm ±10%
Hysteresis	Max. 10% of detecting distance			
Standard detecting target	25×25×1mm (Iron)	30×30×1mm (Iron)	45×45×1mm (Iron)	60×60×1mm (Iron)
Setting distance	0 to 3.5	0 to 7	0 to 10.5	0 to 14
Power supply (Operating voltage)	12 to 24VDC (10 to 30VDC)			
Power consumption	Max. 10mA			
Response frequency	300Hz	250Hz	200Hz	
Residual voltage	Max. 1.5V			
Variation due to Temp. fluctuation	±10% Max. of detecting distance at +20°C within temperature range of -25 to +70°C, PR08 series:Max. ±20%			
Control output	Resistive load:200mA, Inductive load:100mA			
Insulation resistance	Min. 50M Ω (500VDC)			
Dielectric strength	1500VAC 50/60Hz for 1minute			
Vibration	1mm amplitude at frequency of 10 to 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	Operating indicator : red LED			
Operating temperature	-25 to +70°C (non-freezing condition)			
Storage temperature	-30 to +80°C (non-freezing condition)			
Ambient humidity	35 to 95% RH			
Protection circuit	Reverse polarity protection, surge protection circuit, overload & short-circuit protection			
Protection	IP67 (IEC specification)			
Net Weight	About 97g	About 130g		About 200g

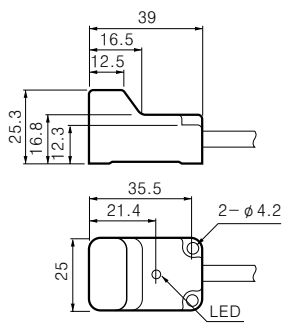
Specifications: AC 2-Wire Switching

Model	PSN25-5AO PSN25-5AC	PSN30-10AO PSN30-10AC	PSN30-15AO PSN30-15AC	PSN40-20AO PSN40-20AC
Detecting distance	5mm ±10%	10mm ±10%	15mm ±10%	20mm ±10%
Hysteresis	Max. 10% of detecting distance			
Standard detecting target	25×25×1mm(Iron)	30×30×1mm(Iron)	45×45×1mm(Iron)	60×60×1mm(Iron)
Setting distance	0 to 3.5	0 to 7	0 to 10.5	0 to 14
Power supply (Operating voltage)	110 to 220VAC (90 to 250VAC)			
Loakage current	Max. 2.5mA			
Response frequency	20Hz			
Residual voltage	Max. 10V			
Variation due to Temp. fluctuation	±10% Max. of detecting distance at +20°C within temperature range of -25 to +70°C , PR08 series:Max. ±10%			
Control output	Resistive load:200mA, Inductive load:100mA			
Insulation resistance	Min. 50MΩ (500VDC)			
Dielectric strength	1500VAC 50/60Hz for 1minute			
Vibration	1mm amplitude at frequency of 10 to 55Hz in each of X,Y,Z directions for 2 hours			
Shock	500ms ² (50G) in X,Y,Z directions for 3 times			
Indicator	Operating indicator : red LED			
Operating temperature	-25 to +70°C (non-freezing condition)			
Storage temperature	-30 to +80°C (non-freezing condition)			
Ambient humidity	35 to 95% RH			
Protection circuit	surge protection circuit			
Protection	IP67(IEC specification)			
Net Weight	About 144g	About 173g	About 254g	

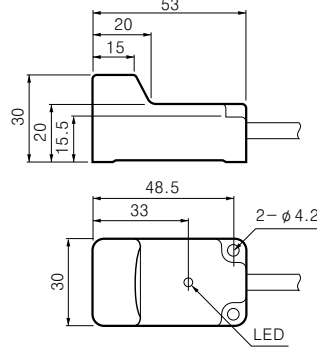
Dimension

Unit:mm

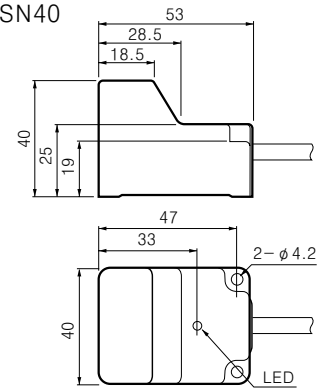
●PSN25



●PSN30



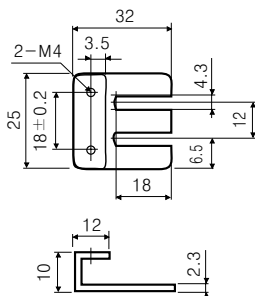
●PSN40



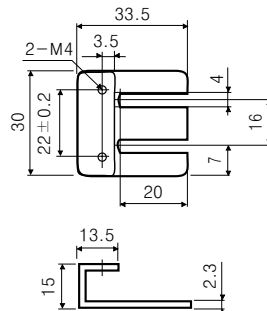
Bracket dimensions

Unit:mm

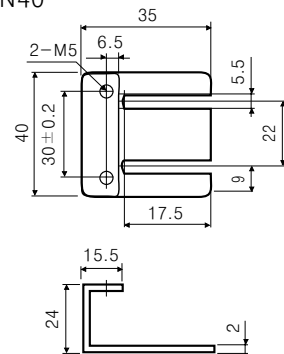
●PSN25



●PSN30



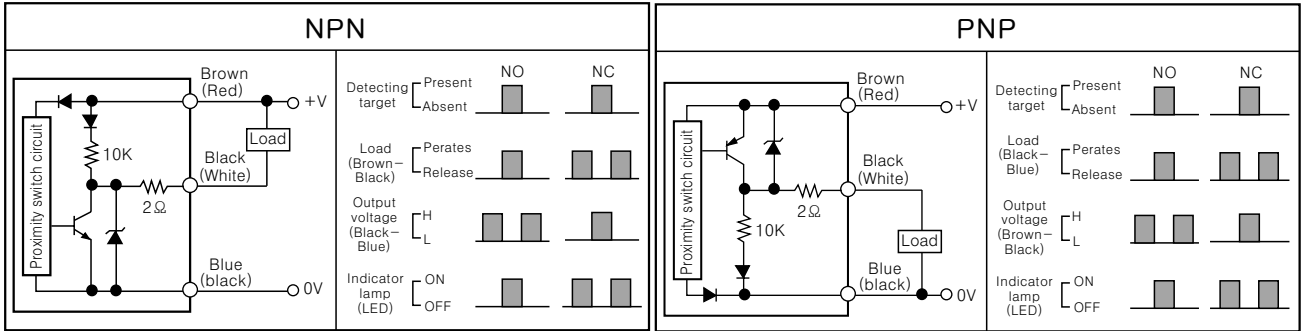
●PSN40



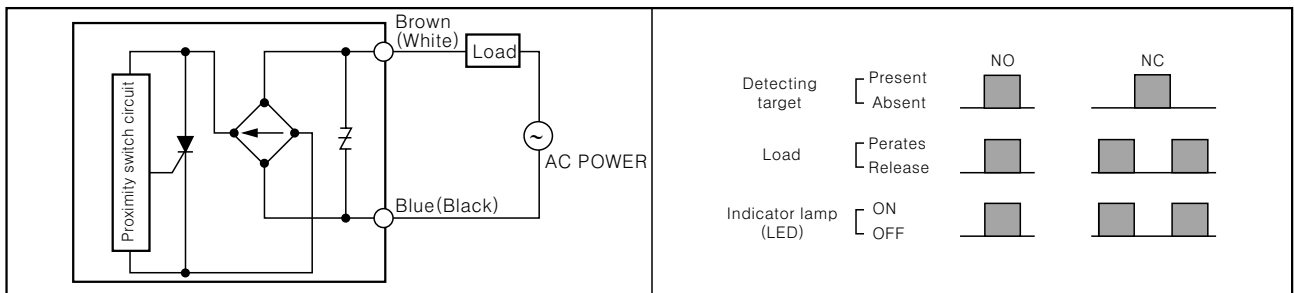
PSN SERIES

Schematics / Operation

DC 3-Wire Switching

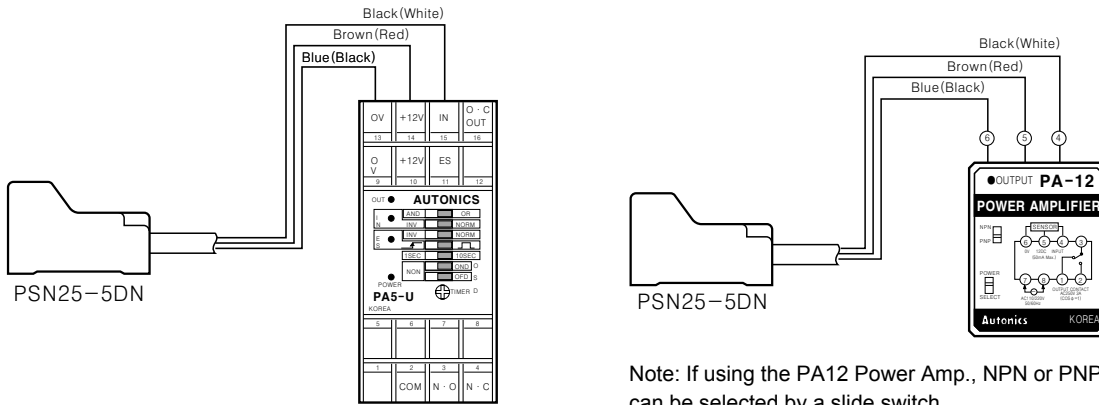


AC 2-Wire Switching

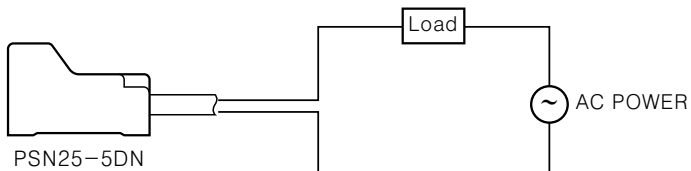


Wiring Diagrams

DC 3-Wire Switching



AC 2-Wire Switching



CAUTION: □

□
 On 2-Wire versions, do not connect both leads □ directly to the supply. A properly rated load must □ be connected in series with the sensor as shown □ in the above wiring diagrams.