

PSN SERIES

Inductive square Proximity switch

■ Features




- U Surge protection function.
- U All DC switching types has reverse polarity protection.
- U All DC switching types has short-circuit protection.
- U Long life & high reliability.
- U Red LED indicator for monitoring the operation.
- U Wide application for replacement of micro switch, limit switch, etc.
- U The load with Max. 200mA can be operated within range of operating voltage 12 to 24VDC, 110 to 220VAC.
- U Wafer resistance to IP67.






■ Type

○ DC switching type

○ AC switching type

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

■ Specification (DC switching type)

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 1 minute			
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)			
Weight	About 97g	About 130g		About 200g

*The weight of above chart is net weight.

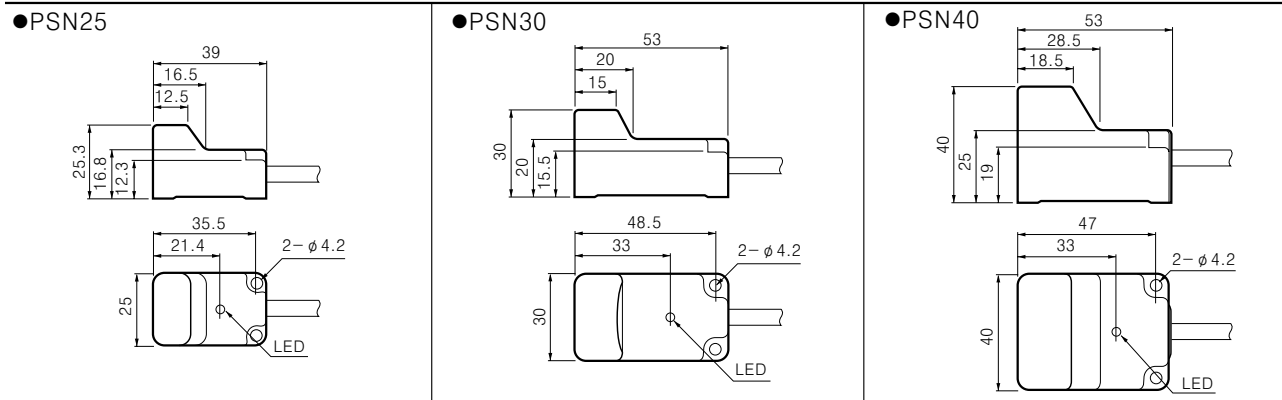
■ Specification (AC switching type)

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)			
Weight	About 144g	About 173g		About 254g

※The weight of above chart is net weight.

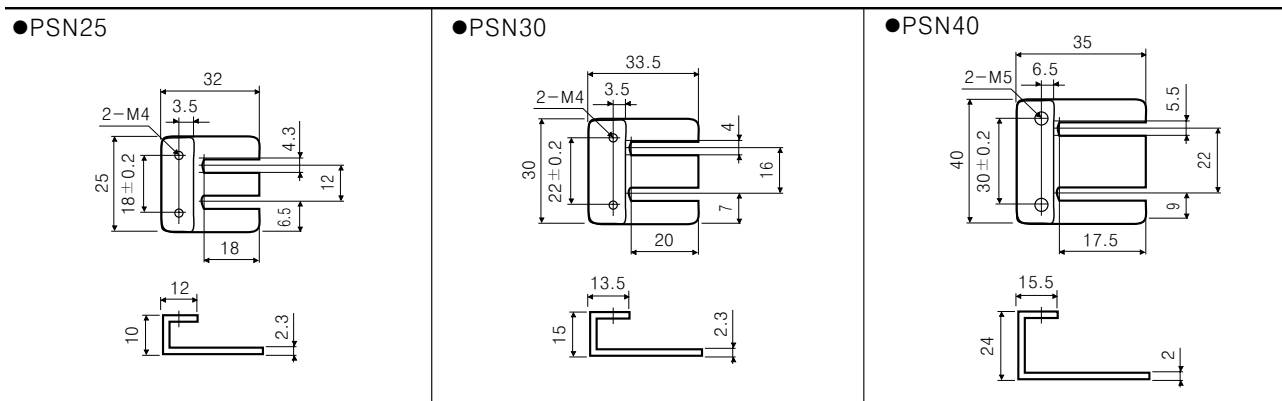
■ Dimension

Unit:mm



■ Bracket dimensions

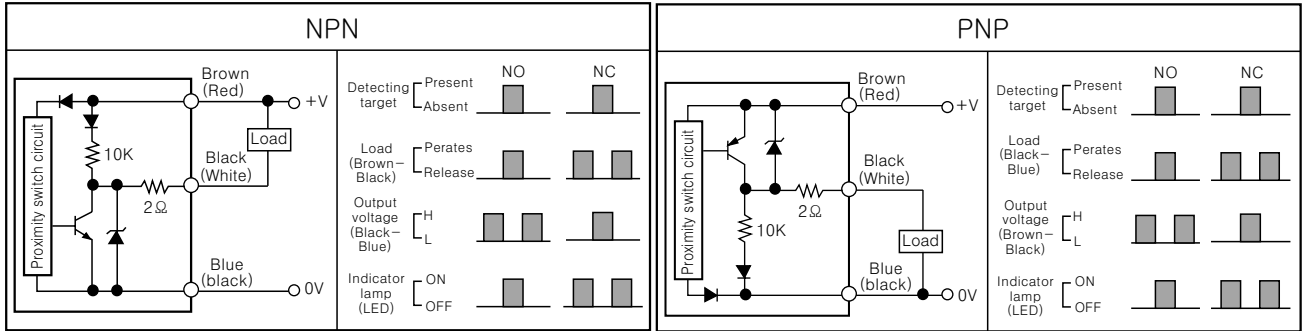
Unit:mm



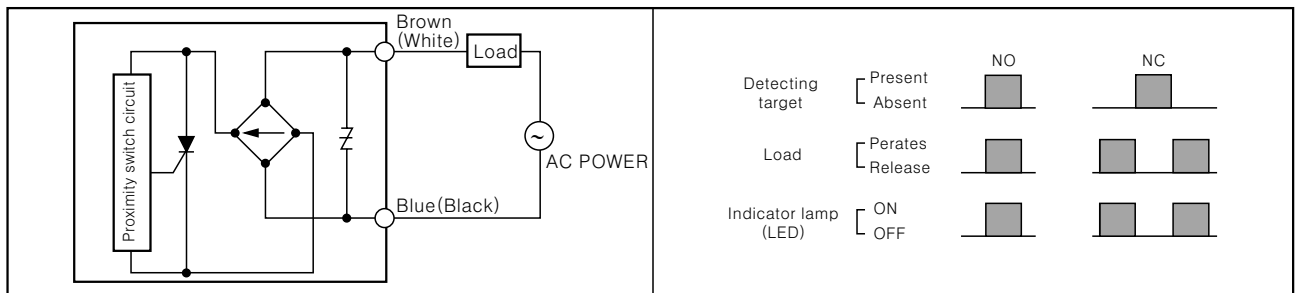
PSN SERIES

■ Control output circuit & operating load

◎DC switching type

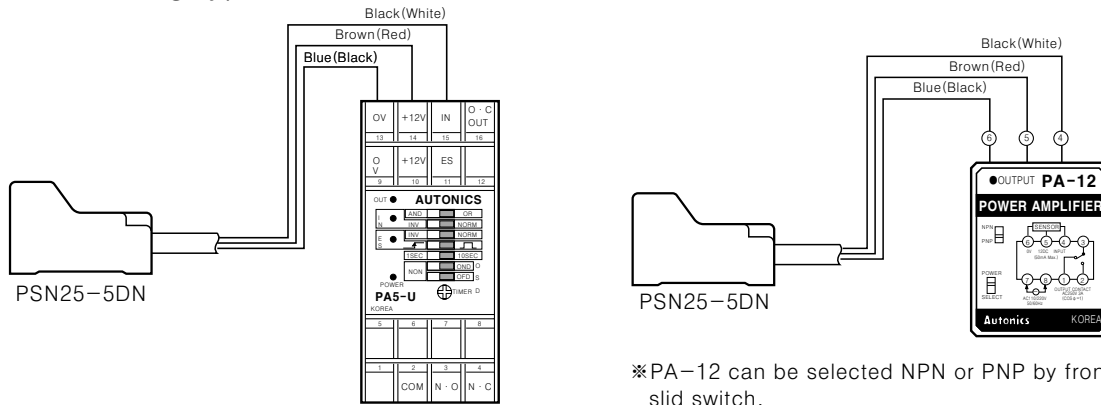


◎AC switching type



■ Connection

◎DC switching type



◎AC switching type

