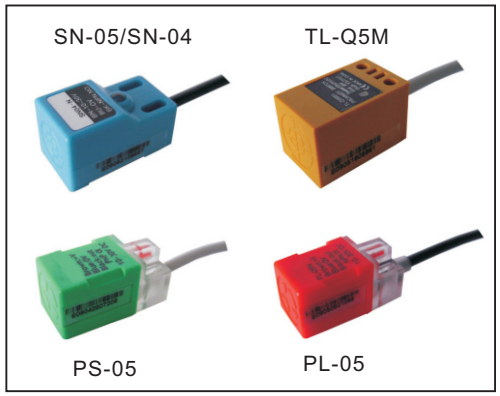
Proximity Sensor

Proximity sensor square type
AC and DC POWER SUPPLY

TL/SN/PL/PS Serial

High accuracy, square type proximity Sensor.

- High accuracy, Square type
- AC and DC power supply
- NPN and PNP
- NO and NC
- Various size
- Front detecting surface
- 5mm sensing distance



Ordering Information(SN-05/SN-04)

Size:18mm*18mm*35mm
Sensing distance:4mm

SN04-N: DC 10-30V, NPN NO, Three wire
SN04-N2: DC 10-30V, NPN NC, Three wire
SN04-P: DC 10-30V, PNP NO, Three wire
SN04-P2: DC 10-30V, PNP NC, Three wire
SN04-D: DC 10-30V, NO, two wire
SN04-D2: DC 10-30V, NC, two wire
SN04-A: AC 220V, NO, two wire
SN04-A2: AC 220V, NC, two wire

Size:18mm*18mm*35mm
Sensing distance: 5mm

SN05-N: DC 10-30V, NPN NO, Three wire
SN05-N2: DC 10-30V, NPN NC, Three wire
SN05-P: DC 10-30V, PNP NO, Three wire
SN05-P2: DC 10-30V, PNP NC, Three wire
SN05-D: DC 10-30V, NO, two wire
SN05-D2: DC 10-30V, NC, two wire
SN05-A: AC 220V, NO, two wire
SN05-A2: AC 220V, NC, two wire

Ordering Information(TL-Q5M)

Size:17mm*17mm*28mm
Sensing distance:5mm

TL-Q5MC1: DC 10-30V, NPN NO, Three wire
TL-Q5MC2: DC 10-30V, NPN NC, Three wire
TL-Q5MB1: DC 10-30V, PNP NO, Three wire
TL-Q5MB2: DC 10-30V, PNP NC, Three wire
TL-Q5MD1: DC 10-30V, NO, two wire
TL-Q5MD2: DC 10-30V, NC, two wire
TL-Q5MY1: AC 220V, NO, two wire
TL-Q5MY2: AC 220V, NC, two wire

Ordering Information(PS-05)

Size:18mm*18mm*28mm
Sensing distance:5mm

PS-05N: DC 10-30V, NPN NO, Three wire
PS-05N2: DC 10-30V, NPN NC, Three wire
PS-05P: DC 10-30V, PNP NO, Three wire
PS-05P2: DC 10-30V, PNP NC, Three wire
PS-05D: DC 10-30V, NO, two wire
PS-05D2: DC 10-30V, NC, two wire
PS-05A: AC 220V, NO, two wire
PS-05A2: AC 220V, NC, two wire

Ordering Information(PL-05)

Size:18mm*18mm*35mm
Sensing distance:5mm

PL-05N: DC 10-30V, NPN NO, Three wire
PL-05N2: DC 10-30V, NPN NC, Three wire
PL-05P: DC 10-30V, PNP NO, Three wire
PL-05P2: DC 10-30V, PNP NC, Three wire
PL-05D: DC 10-30V, NO, Two wire
PL-05D2: DC 10-30V, NC, Two wire
PL-05A: AC 220 V, NO, Two wire
PL-05A2: AC 220 V, NC, Two wire

Specifications(For AC Power Supply)

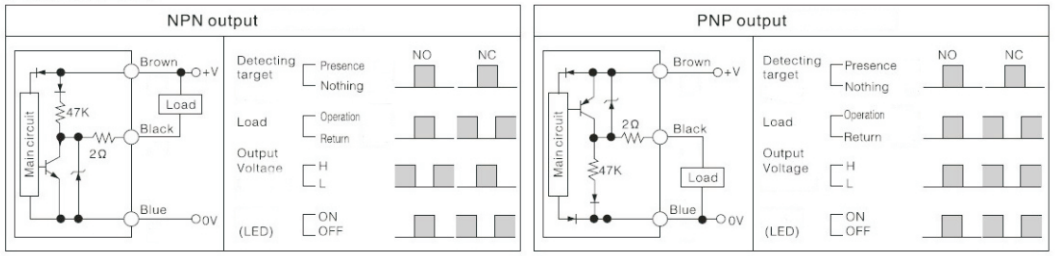
Power Supply	220 VAC
Residual Voltage	Maximum 10V
Current consumption	Maximum 2.2mA
Hysteresis	Maximum 10% of detecting distance
Control Output	Maximum 200mA
Protection	Reverse polarity protection/Surge absorber
Power supply indicator	Green LED
Operating indicator	Red Led
Insulation resistance	Min . 50 Mega Ohm(500VDC)
Dielectric strength	1500VAC (50/60HZ 1Min)
Operating temp	-20°C-70°C
Ambient humidity	35 to 95%RH
Material	Case:Brass Detecting surface:ABS

Specifications(For DC Power Supply)

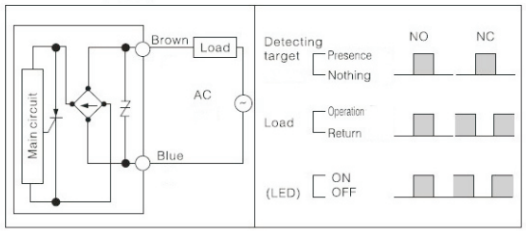
Power Supply	10-30 VDC
Residual Voltage	Maximum 1.5V(DC three wire)/6V(DC two wire)
Current consumption	Maximum 12mA(DC three wire)/0.9mA(DC two wire)
Hysteresis	Maximum 10% of detecting distance
Control Output	Maximum 200mA(DC three wire)/Maximum 100mA(DC two wire)
Protection	Reverse polarity protection/Surge absorber
Power supply indicator	Green LED
Operating indicator	Red Led
Insulation resistance	Min . 50 Mega Ohm(500VDC)
Dielectric strength	1500VAC (50/60HZ 1Min)
Operating temp	-20°C-70°C
Ambient humidity	35 to 95%RH
Material	Case:Brass Detecting surface:ABS

Wiring details

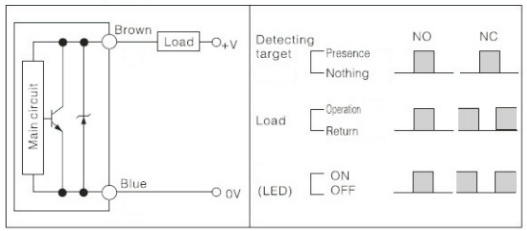
● DC 3-wire



● AC 2-wire



● DC 2-wire



Remark: Be sure to correctly wire the sensor, otherwise may cause the malfunction

Cautions

1:Do not use the sensor under the environment with explosive or ignition
2:Never disassemble, repair nor tamper with the product
3:Keep the supply voltage within the specified range
4:Do not connect the load with big inrush which is exceed the rated maximum inrush current.
5:Do not use the product under following conditions
  1):In the place humidity is high and condensation may occur
  2):In the place where corrosive gas exists
  3):In the place where vibration or shock is directly transmitted to the product

6:Connection or mounting
  1)Be sure to keep the power supply within the range of rated power supply
  2)For extending wires, use a cable 0.3mm2 min and 100m Max in length
  3)Do not pull wire hardly
  4)When using a commercially available switching power regulator, be sure to ground the FG(frame ground)terminals

7:When turning off the power, output pulse may be generated, we recommend turning off the power supply of the load or load line first.

8:AC two wire type and DC two wire type
  1)The load must be serial connected with the sensors otherwise internal components may be damaged,