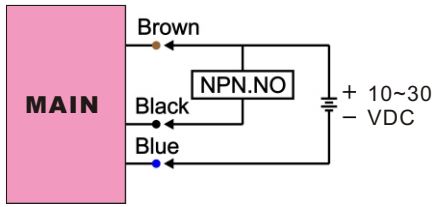


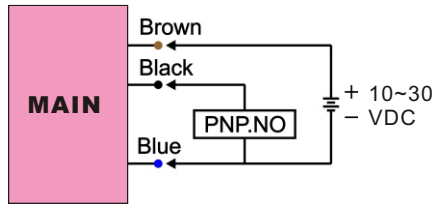
◆ **Wiring diagrams / 接線圖:**

● **DC versions / 直流接線**

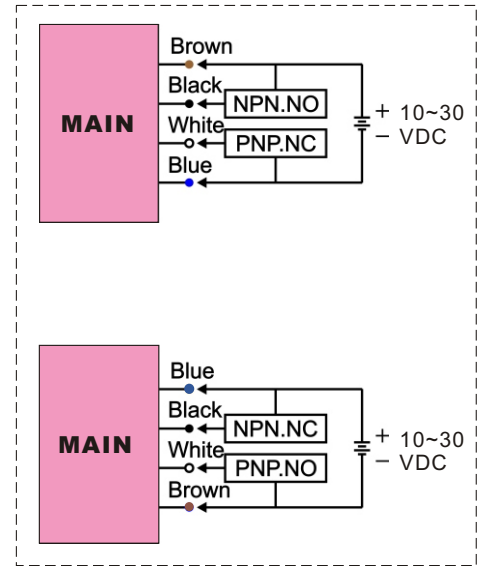
SN □ - N □



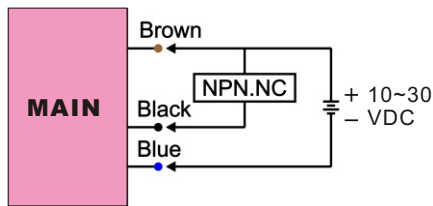
SN □ - P □



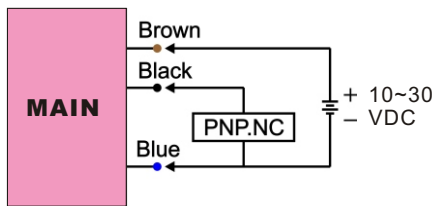
SN □ - KP2 □



SN □ - N2 □

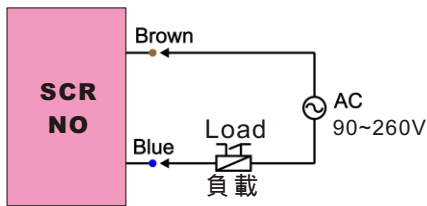


SN □ - P2 □

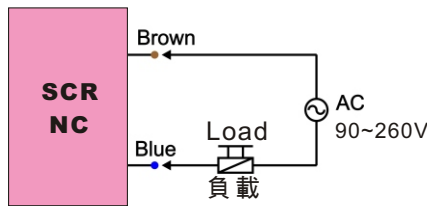


● **AC versions / 交流接線**

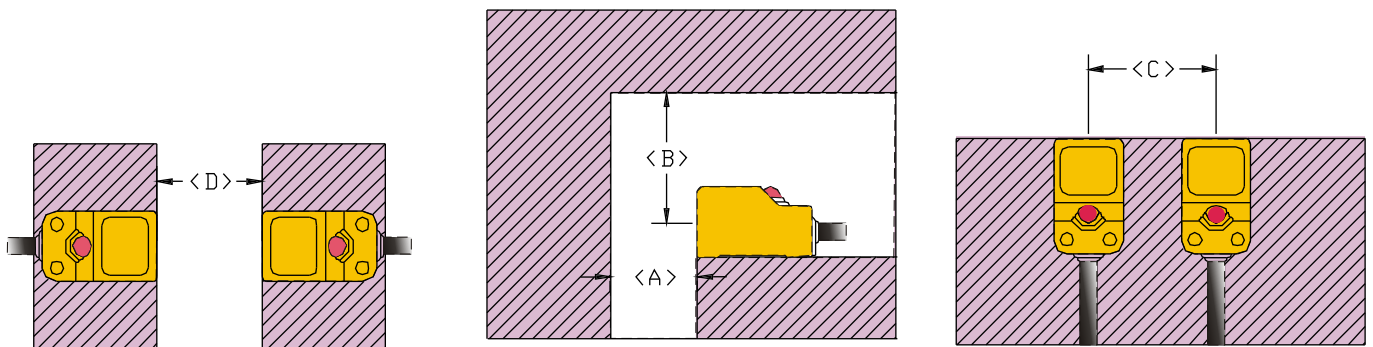
SN □ - A □



SN □ - A2 □



◆ **Precautions for proper installation / 安裝注意事項:**



| | | | | |
|-------|----------|----------|----------|----------|
| SND04 | A ≥ 15mm | B ≥ 20mm | C ≥ 30mm | D ≥ 30mm |
| SN04 | A ≥ 15mm | B ≥ 20mm | C ≥ 30mm | D ≥ 30mm |
| SN05 | A ≥ 20mm | B ≥ 25mm | C ≥ 40mm | D ≥ 40mm |
| SN10 | A ≥ 40mm | B ≥ 30mm | C ≥ 60mm | D ≥ 60mm |
| SN20 | A ≥ 80mm | B ≥ 45mm | C ≥ 80mm | D ≥ 80mm |

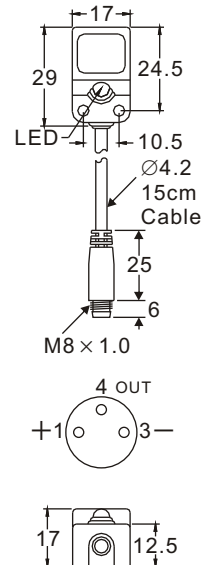
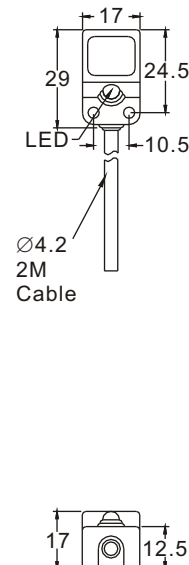
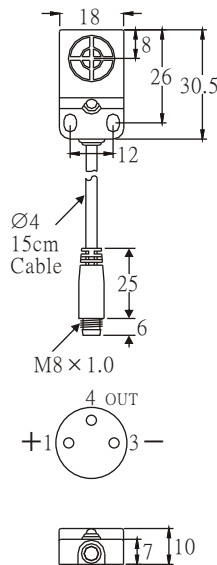
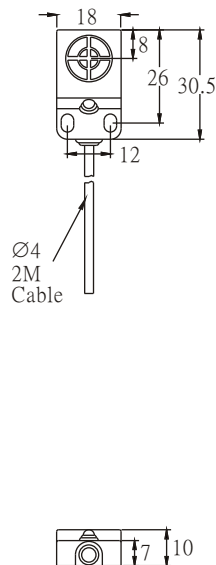
◆ Shape/外觀:



◆ Specifications /規格表:

| | | | | | |
|---------------------------------|----------------------------|-----------------------------------|------------------------------|-----------------------------------|----------|
| Output method /輸出模式 | NPN.NO | SND04-N | SND04-ND | SN05-N | SN05-ND |
| | NPN.NC | SND04-N2 | SND04-N2D | SN05-N2 | SN05-N2D |
| | PNP.NO | SND04-P | SND04-PD | SN05-P | SN05-PD |
| | PNP.NC | SND04-P2 | SND04-P2D | SN05-P2 | SN05-P2D |
| | NPN.NO/NC PNP.NO/NC | — | — | — | — |
| | SCR.NO | — | — | — | — |
| | SCR.NC | — | — | — | — |
| Sensing Surface / 檢測方向 | Front surface / 上方 | | Top surface / 前方 | | |
| Hysteresis / 遲滯 | ≤ 10 % of sensing distance | | ≤ 10 % of sensing distance | | |
| Sensing distance / 檢出距離 | 4 mm | | 4 mm | | |
| Response frequency / 反應頻率 | 500 Hz | | 500 Hz | | |
| Recommended distance / 建議距離 | 0 to 3.2 mm | | 0 ~ 3.2 mm | | |
| Standard sensing object / 標準檢測物 | Iron 18 × 18 × 1mm | | Iron 18 × 18 × 1mm | | |
| Operating voltage / 工作電壓 | DC: 10 ~ 30 VDC | | DC: 10 ~ 30 VDC | | |
| Current consumption / 消耗電流 | ≤ 8 mA no-load | | ≤ 8 mA no-load | | |
| Output current / 輸出電流 | 30V 100 mA Max | | 30V 100 mA Max | | |
| Leakage current / 漏電流 | ≤ 1.1 mA no-load | | ≤ 1.1 mA no-load | | |
| Residual voltage / 殘餘電壓 | ≤ 1.5 VDC | | ≤ 1.5 VDC | | |
| Operating temperature / 工作溫度範圍 | - 25 °C ~ + 60 °C | | - 25 °C ~ + 60 °C | | |
| Wiring method / 出線方式 | 4 Ø × 2M / 3 cores | M8 pigtailed type / M8 接頭15cm 電線式 | Pre-wired Ø4.2 × 2M / 3cores | M8 pigtailed type / M8 接頭15cm 電線式 | |
| Protection degree / 防水等級 | IP 66 | IP 66 | IP 66 | IP 66 | |

◆ Dimensions /尺寸圖:



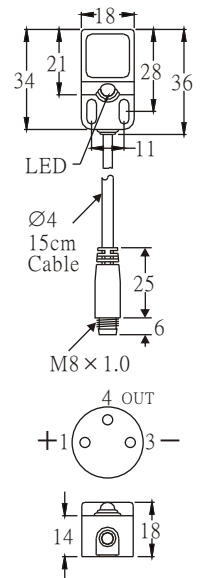
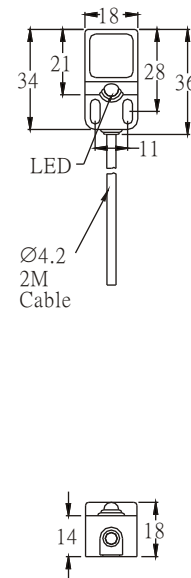
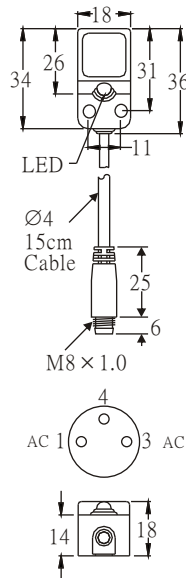
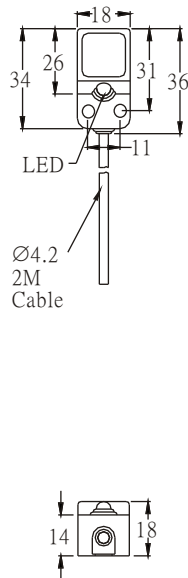
◆ Shape/外觀:



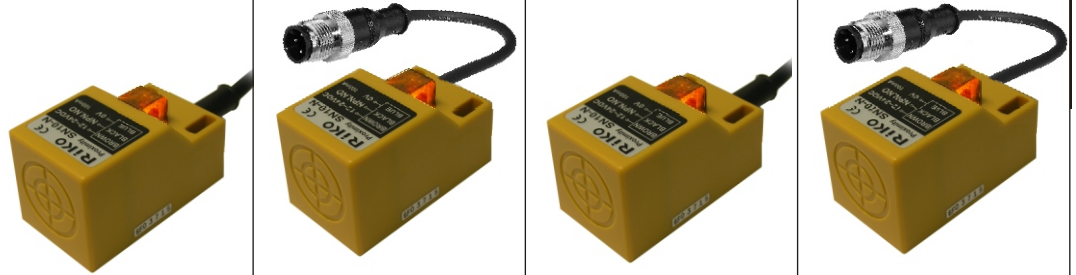
◆ Specifications /規格表:

| | | | | | |
|---------------------------------|---------------------------------|--------------------------------------|---------------------------------|--------------------------------------|----------|
| Output method /輸出模式 | NPN.NO | — | — | SN04-N | SN04-ND |
| | NPN.NC | — | — | SN04-N2 | SN04-N2D |
| | PNP.NO | — | — | SN04-P | SN04-PD |
| | PNP.NC | — | — | SN04-P2 | SN04-P2D |
| | NPN.NO/NC PNP.NO/NC | — | — | — | — |
| | SCR.NO | SN04-A | SN04-AD | — | — |
| | SCR.NC | SN04-A2 | SN04-A2D | — | — |
| Sensing Surface / 檢測方向 | Top surface / 前方 | | | Top surface / 前方 | |
| Hysteresis / 遲滯 | ≅ 10 % of sensing distance | | | ≅ 10 % of sensing distance | |
| Sensing distance / 檢出距離 | 4 mm | | | 4 mm | |
| Response frequency / 反應頻率 | 20 Hz | | | 500 Hz | |
| Recommended distance / 建議距離 | 0 to 3.2 mm | | | 0 to 3.2 mm | |
| Standard sensing object / 標準檢測物 | Iron 18 × 18 × 1mm | | | Iron 18 × 18 × 1mm | |
| Operating voltage / 工作電壓 | AC: 90 ~ 260 V | | | DC: 10 ~ 30 VDC | |
| Current consumption / 消耗電流 | 2 mA Max | | | ≅ 8 mA no-load | |
| Output current / 輸出電流 | 5~ 200 mA Max | | | 30V 100 mA Max | |
| Leakage current / 漏電流 | ≅ 2.0 mA no-load | | | ≅ 1.1 mA no-load | |
| Residual voltage / 殘餘電壓 | ≅ 4VAC | | | ≅ 1.5 VDC | |
| Operating temperature / 工作溫度範圍 | - 25 °C ~ + 60 °C | | | - 25 °C ~ + 60 °C | |
| Wiring method / 出線方式 | Pre-wired Ø4.2 × 2M / 2-wire | M8 pigtailed type / M8 接頭15cm 電線式 | Pre-wired Ø4.2 × 2M / 2-wire | M8 pigtailed type / M8 接頭15cm 電線式 | |
| Protection degree / 防水等級 | IP 66 | IP 66 | IP 66 | IP 66 | |

◆ Dimensions /尺寸圖:



◆ Shape/外觀:

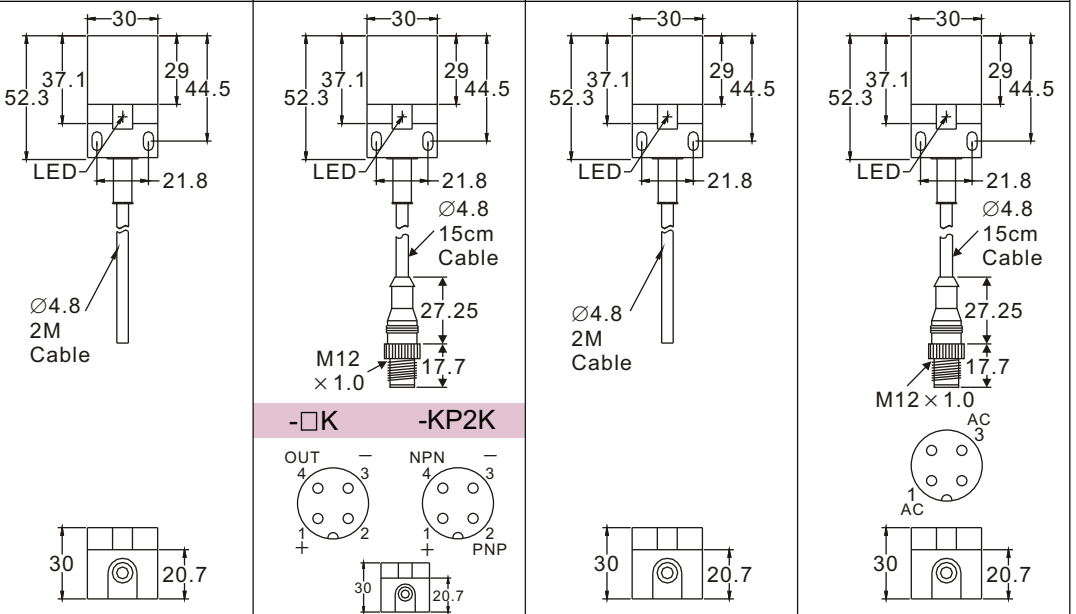


◆ Specifications /規格表:

| | | | | | |
|---------------------------------|----------------------------|----------|----------------------------|---------|----------|
| Output method /輸出模式 | NPN.NO | SN10-N | SN10-NK | — | — |
| | NPN.NC | SN10-N2 | SN10-N2K | — | — |
| | PNP.NO | SN10-P | SN10-PK | — | — |
| | PNP.NC | SN10-P2 | SN10-P2K | — | — |
| | NPN.NO/NC PNP.NO/NC | SN10-KP2 | SN10-KP2K | — | — |
| | SCR.NO | — | — | SN10-A | SN10-AK |
| | SCR.NC | — | — | SN10-A2 | SN10-A2K |
| Sensing Surface / 檢測方向 | Top surface / 前方 | | Top surface / 前方 | | |
| Hysteresis / 遲滯 | ≅ 10 % of sensing distance | | ≅ 10 % of sensing distance | | |
| Sensing distance / 檢出距離 | 10 mm | | 10 mm | | |
| Response frequency / 反應頻率 | 300 Hz | | 20 Hz | | |
| Recommended distance / 建議距離 | 0 to 8 mm | | 0 to 8 mm | | |
| Standard sensing object / 標準檢測物 | Iron 30 × 30 × 1mm | | Iron 30 × 30 × 1mm | | |
| Operating voltage / 工作電壓 | DC: 10 ~ 30 VDC | | AC: 90 ~ 260 VAC | | |
| Current consumption / 消耗電流 | ≅ 8 mA no-load | | 2 mA Max | | |
| Output current / 輸出電流 | 30V 100 mA Max | | 5 ~ 300 mA Max | | |
| Leakage current / 漏電流 | ≅ 1.1 mA no-load | | ≅ 2.0 mA no-load | | |
| Residual voltage / 殘餘電壓 | ≅ 1.5 VDC | | ≅ 4 VAC | | |
| Operating temperature / 工作溫度範圍 | -25 °C ~ +60 °C | | -25 °C ~ +60 °C | | |

| | | | | |
|--------------------------|--------------------------------------------------------|---------------------------------------|-------------------------------|---------------------------------------|
| Wiring method / 出線方式 | Pre-wired Ø4.8 x 2M/3-wire (Kp2:Ø5 x 2M/4 cores) | M12 pigtailed type /M12 接頭15cm 電線式 | Pre-wired Ø4.8 x 2M/2-wire | M12 pigtailed type /M12 接頭15cm 電線式 |
| Protection degree / 防水等級 | IP 66 | IP 66 | IP 66 | IP 66 |

◆ Dimensions /尺寸圖:



◆ Shape/外觀:

◆ Specifications /規格表:



| | | | | | |
|---------------------------------|---------------------------------|----------|-----------|---------------------------------|----------|
| Output method /輸出模式 | NPN.NC | SN20-N2 | SN20-N2K | — | — |
| | PNP.NO | SN20-P | SN20-PK | — | — |
| | PNP.NC | SN20-P2 | SN20-P2K | — | — |
| | NPN.NO/NC | SN20-KP2 | SN20-KP2K | — | — |
| | PNP.NO/NC | — | — | SN20-A | SN20-AK |
| | SCR.NO | — | — | SN20-A2 | SN20-A2K |
| SCR.NC | — | — | — | — | |
| Sensing Surface / 檢測方向 | Top surface / 前方 | | | Top surface / 前方 | |
| Hysteresis / 遲滯 | $\leq 10\%$ of sensing distance | | | $\leq 10\%$ of sensing distance | |
| Sensing distance / 檢出距離 | 20 mm | | | 20 mm | |
| Response frequency / 反應頻率 | 50 Hz | | | 20 Hz | |
| Recommended distance / 建議距離 | 0 to 16 mm | | | 0 to 16 mm | |
| Standard sensing object / 標準檢測物 | Iron 40 × 40 × 1mm | | | Iron 40 × 40 × 1mm | |
| Operating voltage / 工作電壓 | DC: 10 ~ 30 VDC | | | AC: 90 ~ 260 VAC | |
| Current consumption / 消耗電流 | ≤ 8 mA no-load | | | 2 mA Max | |
| Output current / 輸出電流 | 30V 100 mA Max | | | 5 ~ 300 mA Max | |
| Leakage current / 漏電流 | ≤ 1.1 mA no-load | | | ≤ 2.0 mA no-load | |
| Residual voltage / 殘餘電壓 | ≤ 1.5 VDC | | | ≤ 4 VAC | |
| Operating temperature / 工作溫度範圍 | - 25 °C ~ + 60 °C | | | - 25 °C ~ + 60 °C | |

| | | | | |
|----------------------|--------------------------------------------------------|---------------------------------------|-------------------------------|---------------------------------------|
| Wiring method / 出線方式 | Pre-wired Ø4.8 x 2M/3-wire (Kp2:Ø5 x 2M/4 cores) | M12 pigtailed type /M12 接頭15cm 電線式 | Pre-wired Ø4.8 x 2M/2-wire | M12 pigtailed type /M12 接頭15cm 電線式 |
|----------------------|--------------------------------------------------------|---------------------------------------|-------------------------------|---------------------------------------|

| | | | | |
|--------------------------|-------|-------|-------|-------|
| Protection degree / 防水等級 | IP 66 | IP 66 | IP 66 | IP 66 |
|--------------------------|-------|-------|-------|-------|

◆ Dimensions /尺寸圖:

