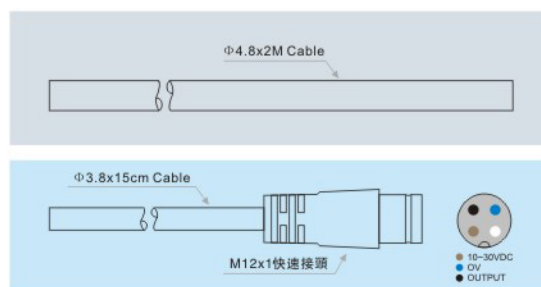
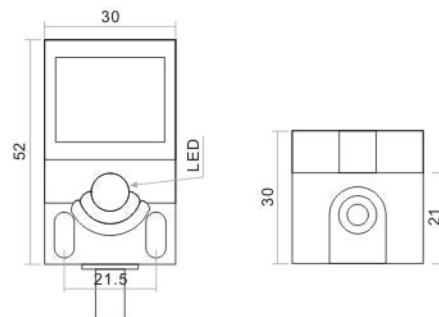


方型近接開關

INDUCTIVE PROXIMITY SENSOR

SN10系列



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	—	—
	SCR.NO	—	—	SN10-A1
	SCR.NC	—	—	SN10-A2
Sensing Surface / 檢測方向	Front surface/前方			
Hysteresis / 磁滯	$\leq 10\%$ of sensing distance			
Standard Sensing Object / 標準檢測物	Iron 30 x 30 x 1mm			
Sensing Distance / 檢測距離	10mm			
Secure Sensing Distance / 建議距離	$\leq 8\text{mm}$			
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護			—
Response Frequency / 反應頻率	300 Hz		20 Hz	
Operating Voltage / 工作電壓	10 ~ 30 VDC		24~260 VAC	
Current Consumption / 消耗電流	$\leq 8\text{ mA no-load}$		2 mA Max	
Load Current / 負載電流	200 mA Max (KP2: 100 mA Max)		5~300 mA Max	
Leakage Current / 漏電流	$\leq 1.1\text{ mA no-load}$		$\leq 2.0\text{ mA no-load}$	
Residual Voltage / 殘餘電壓	$\leq 0.7\text{VDC}$		$\leq 4\text{VDC}$	
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)			
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.			
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C (KP2:建議 0°C ~ + 70°C)			
Housing / 外觀材質	ABS			
Protection Degree / 防水等級	IP 67			
Wiring Method / 出線方式	Pre-wire $\Phi 4.8 \times 2\text{M}$ / 3-wires (KP2: $\Phi 4.8 \times 2\text{M}$ / 4 Wires)	M12接頭15cm電線式	Pre-wire $\Phi 4.8 \times 2\text{M}$ / 2-wires	
Weight / 重量	Approx. 135g	Approx. 105g	Approx. 130g	

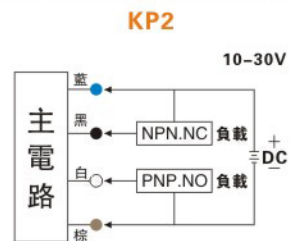
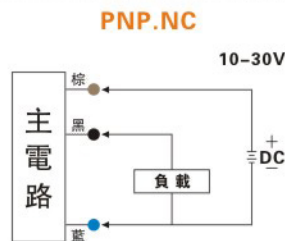
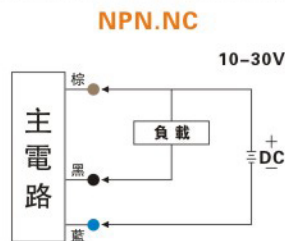
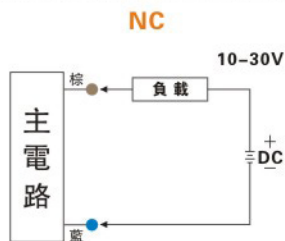
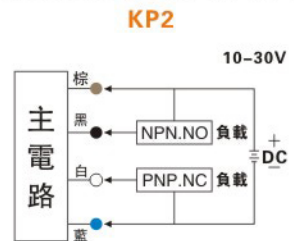
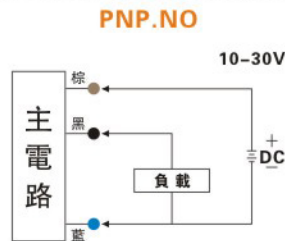
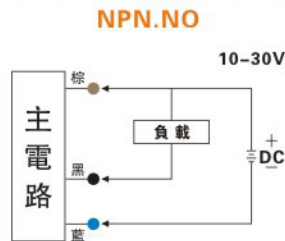
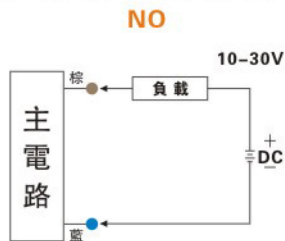
※ KP2 產品受環境使用限制

接線圖 WIRING SCHEMES

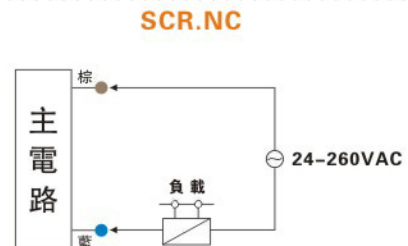
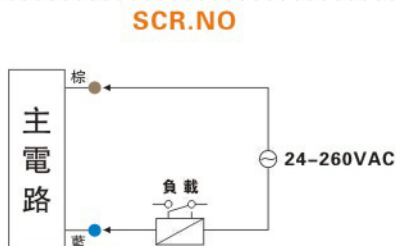
DC 2線式

DC 3線式

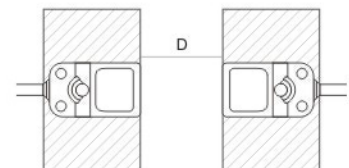
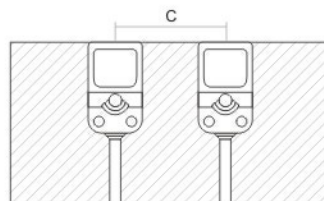
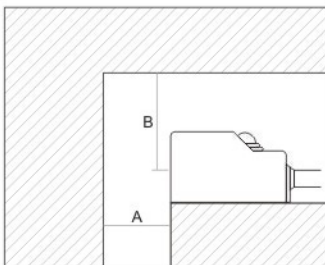
DC 4線式



AC 2線式



注意事項 HITS ON CORRECT USE



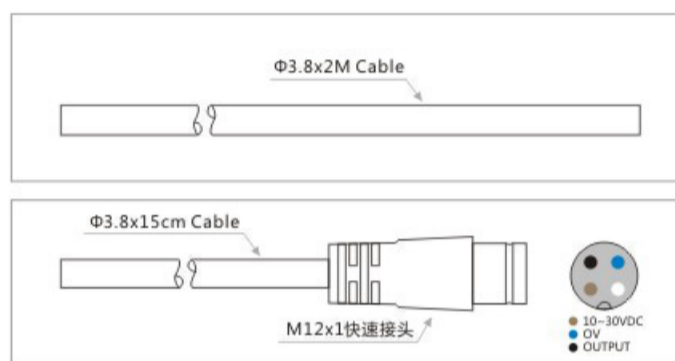
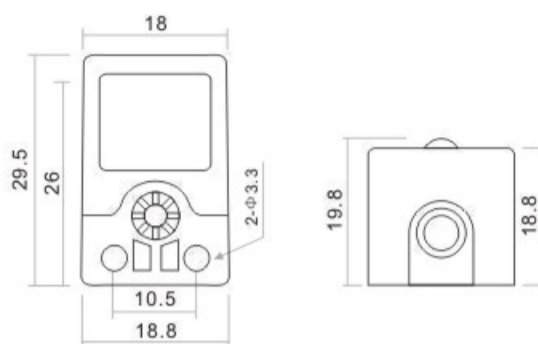
RK-05	A ≥ 20mm B ≥ 25mm C ≥ 40mm D ≥ 40mm
RO-05	A ≥ 20mm B ≥ 25mm C ≥ 40mm D ≥ 40mm
SA04	A ≥ 30mm B ≥ 30mm C ≥ 50mm D ≥ 50mm
SE05	A ≥ 20mm B ≥ 25mm C ≥ 40mm D ≥ 40mm

SN04	A ≥ 15mm B ≥ 20mm C ≥ 30mm D ≥ 30mm
SN05	A ≥ 20mm B ≥ 25mm C ≥ 40mm D ≥ 40mm
SN07	A ≥ 30mm B ≥ 30mm C ≥ 50mm D ≥ 50mm
SN10	A ≥ 40mm B ≥ 35mm C ≥ 60mm D ≥ 60mm
SN20	A ≥ 80mm B ≥ 45mm C ≥ 80mm D ≥ 80mm

RO-05系列

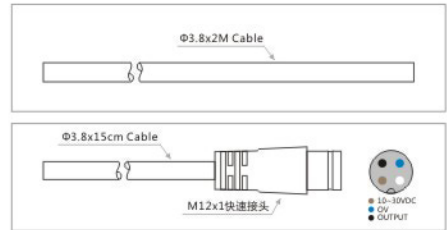
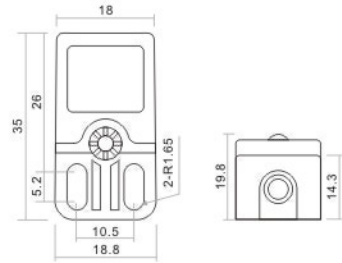


K



Output Method / 輸出模式	NPN.NO	RO-05N1	RO-05N1K
	NPN.NC	RO-05N2	RO-05N2K
	PNP.NO	RO-05P1	RO-05P1K
	PNP.NC	RO-05P2	RO-05P2K
Sensing Surface / 檢測方向	Front surface/前方		
Standard Sensing Object / 標準檢測物	Iron 18 x18 x1mm		
Sensing Distance / 檢測距離	5mm		
Secure Sensing Distance / 建議距離	≤ 4mm		
Hysteresis / 磁滯	≤ 10 % of sensing distance		
Response Frequency / 反應頻率	600 Hz		
Operating Voltage / 工作電壓	10 ~ 30 VDC (另有5VDC專用)		
Current Consumption / 消耗電流	≤ 8 mA no-load		
Load Current / 負載電流	200 mA Max		
Leakage Current / 漏電流	≤ 1.1 mA no-load		
Residual Voltage / 殘餘電壓	≤ 0.7VDC		
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)		
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.		
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C		
Housing / 外觀材質	ABS / PC		
Protection Degree / 防水等級	IP 67		
Wiring Method / 出線方式	Pre-wire Φ3.8 x 2M / 3-wires	M12接頭15cm電線式	
Weight / 重量	Approx. 60g	Approx. 30g	

RK-05系列

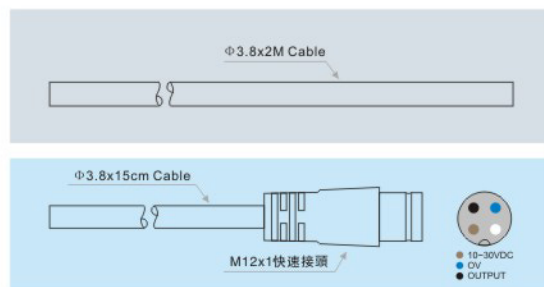
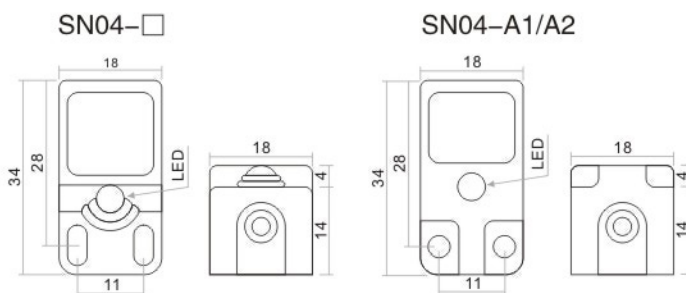


Output Method / 輸出模式	NPN.NO	RK-05N1	RK-05N1K
	NPN.NC	RK-05N2	RK-05N2K
	PNP.NO	RK-05P1	RK-05P1K
	PNP.NC	RK-05P2	RK-05P2K
Sensing Surface / 檢測方向	Front surface/前方		
Standard Sensing Object / 標準檢測物	Iron 18 x18 x1mm		
Sensing Distance / 檢測距離	5mm		
Secure Sensing Distance / 建議距離	≤ 4mm		
Hysteresis / 磁滯	≤ 10 % of sensing distance		
Response Frequency / 反應頻率	600 Hz		
Operating Voltage / 工作電壓	10 ~ 30 VDC (另有5VDC專用)		
Current Consumption / 消耗電流	≤ 8 mA no-load		
Load Current / 負載電流	200 mA Max		
Leakage Current / 漏電流	≤ 1.1 mA no-load		
Residual Voltage / 殘餘電壓	≤ 0.7VDC		
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)		
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.		
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C		
Housing / 外觀材質	ABS / PC		
Protection Degree / 防水等級	IP 67		
Wiring Method / 出線方式	Pre-wire Ø3.8 x 2M / 3-wires	M12接頭15cm電線式	
Weight / 重量	Approx. 60g		Approx. 30g

方型近接開關

INDUCTIVE PROXIMITY SENSOR

SN04系列

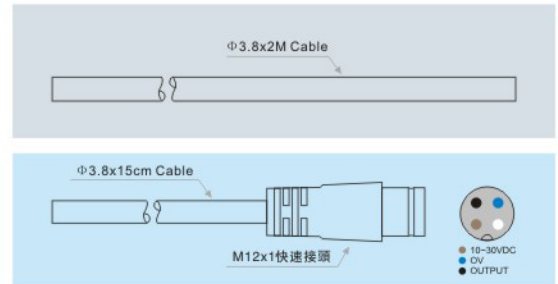
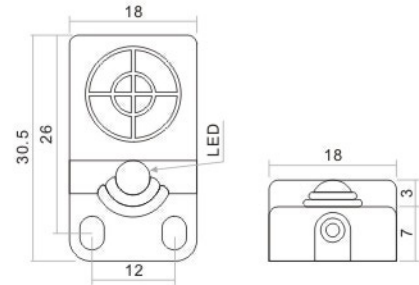


Output Method / 輸出模式	NPN.NO	SN04-N	SN04-NK	—
	NPN.NC	SN04-N2	SN04-N2K	—
	PNP.NO	SN04-P	SN04-PK	—
	PNP.NC	SN04-P2	SN04-P2K	—
	SCR.NO	—	—	SN04-A1
	SCR.NC	—	—	SN04-A2
Sensing Surface / 檢測方向	Front surface/前方			
Hysteresis / 磁滯	≤ 10 % of sensing distance			
Standard Sensing Object / 標準檢測物	Iron 18 x18 x1mm			
Sensing Distance / 檢測距離	4mm			
Secure Sensing Distance / 建議距離	≤ 3.2mm			
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		—	
Response Frequency / 反應頻率	600 Hz		20 Hz	
Operating Voltage / 工作電壓	10 ~ 30 VDC (另有5VDC專用)		24~260 VAC	
Current Consumption / 消耗電流	≤ 8 mA no-load		2 mA Max	
Load Current / 負載電流	200 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	≤ 0.7VDC		≤ 4VDC	
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)			
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.			
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C			
Housing / 外觀材質	ABS			
Protection Degree / 防水等級	IP 67			
Wiring Method / 出線方式	Pre-wire Φ3.8x2M / 3-wires	M12接頭15cm電線式	Pre-wire Φ3.8x2M / 2-wires	
Weight / 重量	Approx. 60g	Approx. 30g	Approx. 65g	

SND04系列



K

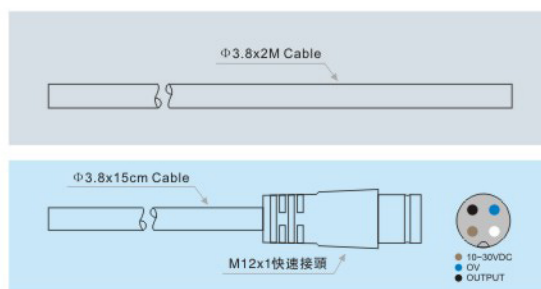
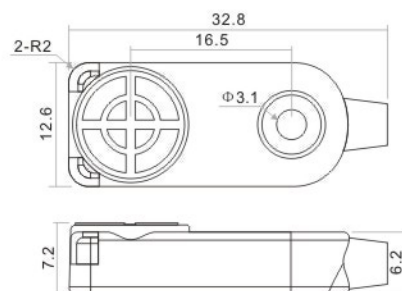


Output Method / 輸出模式	NPN.NO	SND04-N1	SND04-NK
	NPN.NC	SND04-N2	SND04-N2K
	PNP.NO	SND04-P1	SND04-PK
	PNP.NC	SND04-P2	SND04-P2K
Sensing Surface / 檢測方向		Top surface / 上方	
Standard Sensing Object / 標準檢測物		Iron 18 x18 x1mm	
Sensing Distance / 檢測距離		4mm	
Secure Sensing Distance / 建議距離		≤ 3.2mm	
Hysteresis / 磁滯		≤ 10 % of sensing distance	
Response Frequency / 反應頻率		600 Hz	
Operating Voltage / 工作電壓		10 ~ 30 VDC (另有5VDC專用)	
Current Consumption / 消耗電流		≤ 8 mA no-load	
Load Current / 負載電流		200 mA Max	
Leakage Current / 漏電流		≤ 1.1 mA no-load	
Residual Voltage / 殘餘電壓		≤ 0.7VDC	
Protection Loop / 迴路保護		極性迴路保護和輸出短路保護	
Insulation Resistance / 隔離阻抗		20M Ω min. (500VDC)	
Voltage Withstandability / 絕緣耐壓		1000VAC 60Hz for 60 Sec.	
Operating Temperature / 工作溫度範圍		-25°C ~ + 70°C	
Housing / 外觀材質		ABS / PC	
Protection Degree / 防水等級		IP 67	
Wiring Method / 出線方式		Pre-wire Φ3.8 x 2M / 3-wires	M12接頭15cm電線式
Weight / 重量		Approx. 60g	Approx. 25g

方型近接開關

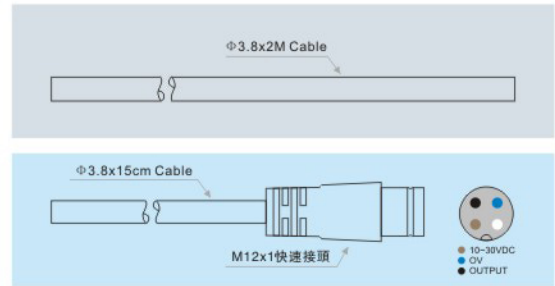
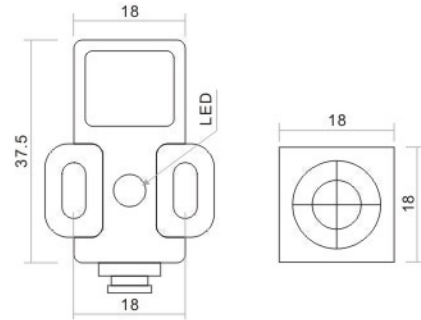
INDUCTIVE PROXIMITY SENSOR

RND-04系列



Output Method / 輸出模式	NPN.NO	RND-04N1	RND-04N1K
	NPN.NC	RND-04N2	RND-04N2K
	PNP.NO	RND-04P1	RND-04P1K
	PNP.NC	RND-04P2	RND-04P2K
Sensing Surface / 檢測方向	Top surface / 上方		
Standard Sensing Object / 標準檢測物	Iron 12 x12 x1mm		
Sensing Distance / 檢測距離	4mm		
Secure Sensing Distance / 建議距離	≤ 3.2mm		
Hysteresis / 磁滯	≤ 10 % of sensing distance		
Response Frequency / 反應頻率	600 Hz		
Operating Voltage / 工作電壓	10 ~ 30 VDC		
Current Consumption / 消耗電流	≤ 8 mA no-load		
Load Current / 負載電流	200 mA Max		
Leakage Current / 漏電流	≤ 1.1 mA no-load		
Residual Voltage / 殘餘電壓	≤ 0.7VDC		
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)		
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.		
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C		
Housing / 外觀材質	PC		
Protection Degree / 防水等級	IP 67		
Wiring Method / 出線方式	Pre-wire Φ3.8 x 2M / 3-wires	M12接頭15cm電線式	
Weight / 重量	Approx. 30g	Approx. 15g	

SE05系列



Output Method / 輸出模式	NPN.NO	SE05-N	SE05-NK
	NPN.NC	SE05-N2	SE05-N2K
	PNP.NO	SE05-P	SE05-PK
	PNP.NC	SE05-P2	SE05-P2K
Sensing Surface / 檢測方向	Front surface/前方		
Standard Sensing Object / 標準檢測物	Iron 18 x18 x1mm		
Sensing Distance / 檢測距離	5mm		
Secure Sensing Distance / 建議距離	≤ 4mm		
Hysteresis / 磁滯	≤ 10 % of sensing distance		
Response Frequency / 反應頻率	600 Hz		
Operating Voltage / 工作電壓	10 ~ 30 VDC (另有5VDC專用)		
Current Consumption / 消耗電流	≤ 8 mA no-load		
Load Current / 負載電流	200 mA Max		
Leakage Current / 漏電流	≤ 1.1 mA no-load		
Residual Voltage / 殘餘電壓	≤ 0.7VDC		
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)		
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.		
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C		
Housing / 外觀材質	ABS		
Protection Degree / 防水等級	IP 67		
Wiring Method / 出線方式	Pre-wire Φ3.8 x 2M / 3-wires	M12接頭15cm電線式	
Weight / 重量	Approx. 60g	Approx. 30g	

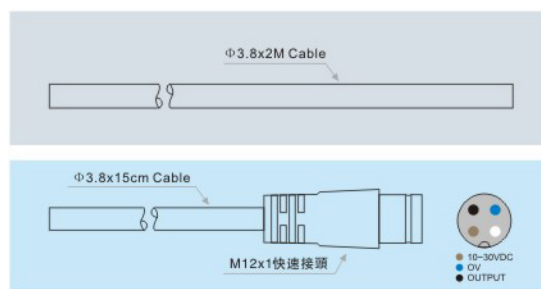
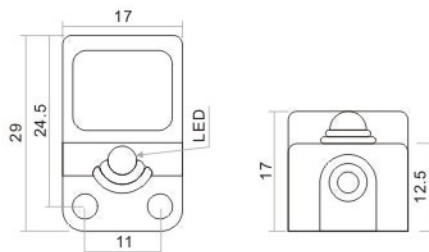
方型近接開關

INDUCTIVE PROXIMITY SENSOR

SN05系列



K

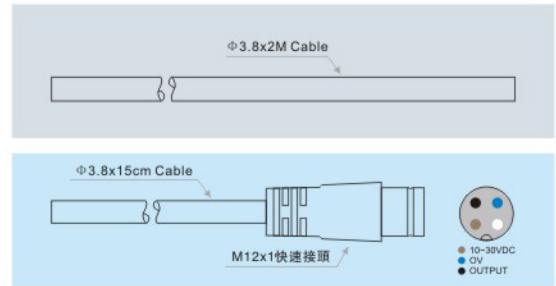
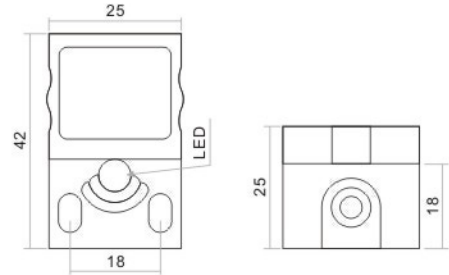


Output Method / 輸出模式	NPN.NO	SN05-N	SN05-NK
	NPN.NC	SN05-N2	SN05-N2K
	PNP.NO	SN05-P	SN05-PK
	PNP.NC	SN05-P2	SN05-P2K
Sensing Surface / 檢測方向	Front surface/前方		
Hysteresis / 磁滯	≤ 10 % of sensing distance		
Standard Sensing Object / 標準檢測物	Iron 17 x17 x1mm		
Sensing Distance / 檢測距離	5mm		
Secure Sensing Distance / 建議距離	≤ 4.0mm		
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護		
Response Frequency / 反應頻率	600 Hz		
Operating Voltage / 工作電壓	10 ~ 30 VDC (另有5VDC專用)		
Current Consumption / 消耗電流	≤ 8 mA no-load		
Load Current / 負載電流	200 mA Max		
Leakage Current / 漏電流	≤ 1.1 mA no-load		
Residual Voltage / 殘餘電壓	≤ 0.7VDC		
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)		
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.		
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C		
Housing / 外觀材質	ABS		
Protection Degree / 防水等級	IP 67		
Wiring Method / 出線方式	Pre-wire Φ3.8 x 2M / 3-wires	M12接頭15cm電線式	
Weight / 重量	Approx. 55g	Approx. 25g	

SN07系列



K



Output Method / 輸出模式	NPN.NO	SN07-N	SN07-NK	—
	NPN.NC	SN07-N2	SN07-N2K	—
	PNP.NO	SN07-P	SN07-PK	—
	PNP.NC	SN07-P2	SN07-P2K	—
	SCR.NO	—	—	SN07-A1
	SCR.NC	—	—	SN07-A2
Sensing Surface / 檢測方向	Front surface/前方			
Hysteresis / 磁滯	≤ 10 % of sensing distance			
Standard Sensing Object / 標準檢測物	Iron 25 x25 x1mm			
Sensing Distance / 檢測距離	7mm			
Secure Sensing Distance / 建議距離	≤ 5.6mm			
Protection Loop / 迴路保護	極性迴路保護和輸出短路保護			—
Response Frequency / 反應頻率	600 Hz		20 Hz	
Operating Voltage / 工作電壓	10 ~ 30 VDC		24~260 VAC	
Current Consumption / 消耗電流	≤ 8 mA no-load		2 mA Max	
Load Current / 負載電流	200 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	≤ 0.7VDC		≤ 4VDC	
Insulation Resistance / 隔離阻抗	20M Ω min. (500VDC)			
Voltage Withstandability / 絕緣耐壓	1000VAC 60Hz for 60 Sec.			
Operating Temperature / 工作溫度範圍	-25°C ~ + 70°C			
Housing / 外觀材質	ABS			
Protection Degree / 防水等級	IP 67			
Wiring Method / 出線方式	Pre-wire Φ3.8x2M / 3-wires	M12接頭15cm電線式	Pre-wire Φ3.8x2M / 2-wires	
Weight / 重量	Approx. 95g	Approx. 60g	Approx. 90g	