

TSN

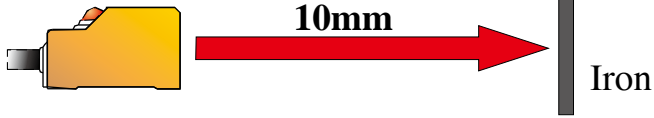
Long Sensing Range Rectangular Inductive Proximity Sensor

◆ **Around Two times longer sensing distance than conventional models.**

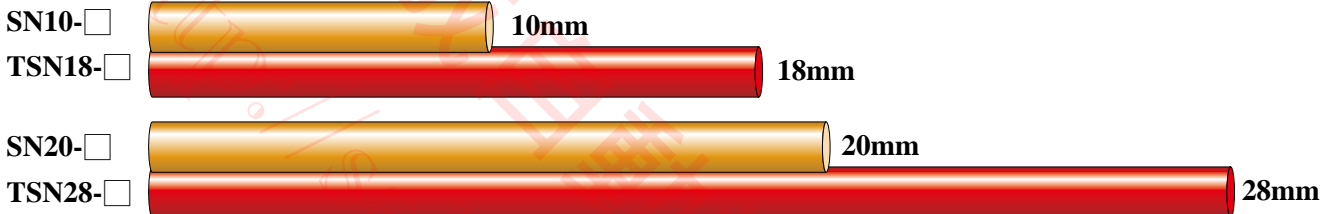
檢測距離接近原有機型的兩倍

TSC series features 180% longer sensing distance than conventional models. It makes the detection more stable. TSC系列比原有的機型檢測距提升了180%，使檢測更加可靠。

SN10-□ (Conventional model)



TSN18-□ (□30 Unshielded)



Longer sensing range

Short circuit protection

Noise immunity

Waterproof

◆ **Short Circuit Protection / Reverse Polarity Protection**

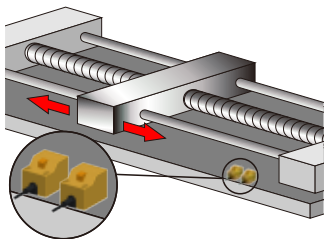
短路保護/極性保護裝置

The TSC series will activate the short circuit protection/reverse polarity protection to reduce the damage caused by the wrong operation. / 當使用者誤接輸出線或極性相反時，將會啟動短路保護/極性保護，以降低因誤接而所造成的損害。

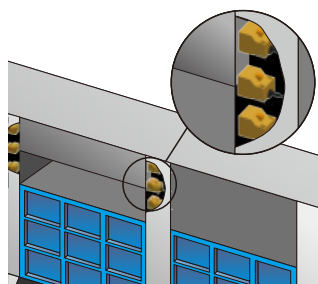
◆ **Waterproof / 防水**

IP66 protection. The sensor can be installed outdoors. It can prevent damage caused by immersion or dip in water under regular standard. / 防水等級為IP66，可裝置在室外，在一定標準下能確保不因浸水而造成損壞。

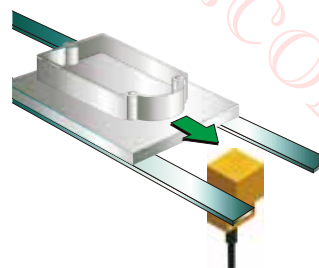
◆ **Applications / 應用例**



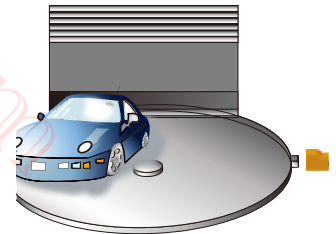
Detecting worktable positions.
/ 檢測工作台的位置



Sensing the height of a sluice gate.
/ 感應水閘門的高度





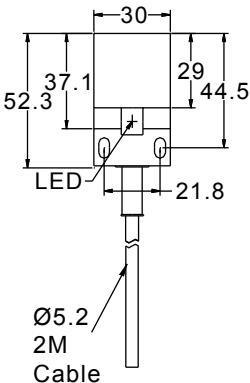
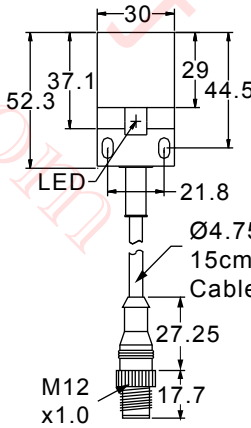
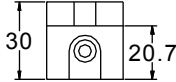
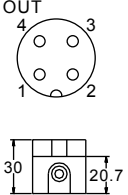
Positioning metal pad.
/ 定位金屬錘墊。



Sensing the rotary plate of parking building.
/ 感應車庫的旋轉盤。

Long Sensing Range Rectangular Inductive Proximity Sensor



◆Shape / 外觀 :			
◆Specifications / 規格表 :			
Output method 輸出模式	NPN N.O.	TSN18-N	TSN18-NK
	NPN N.C.	-	-
	PNP N.O.	TSN18-P	TSN18-PK
	PNP N.C.	-	-
	NPN N.O./N.C.	-	-
	PNP N.O./N.C.	-	-
	SCR N.O.	-	-
	SCR N.C.	-	-
Sensing Surface / 檢測方向		Top surface / 前方	
Standard sensing object / 標準檢測物		Iron 30 x 30 x 1mm	
Sensing distance / 檢出距離		18 mm	
Secure sensing distance / 建議距離		0 to 14.4 mm	
Hysteresis / 遲滯		≤ 15 % of sensing distance	
Response time / 反應時間		5ms Max.	
Operating voltage / 工作電壓		DC 12 ~ 24V	
Current consumption / 消耗電流		≤ 8 mA no-load	
Load current / 負載電流		100 mA Max. at DC 24V	
Leakage current / 漏電流		≤ 1.1 mA no-load	
Residual voltage / 殘餘電壓		≤ DC 1.5V	
Insulation resistance / 隔離阻抗		20MΩ min. (DC500V)	
Voltage withstandability / 絕緣耐壓		AC1000V 60Hz for 60 Sec.	
Operating temperature / 工作溫度範圍		-5 °C ~ + 50 °C	
Protection degree / 防水等級		IP 66	IP 66
Wiring method / 出線方式		Pre-wired Ø5.2 x 2M/3-wires	M12 pigtailed type / M12 接頭15cm 電線式
Weight / 重量		Approx. 125g	Approx. 70g
◆Dimensions/尺寸圖 :		 <p>Dimensions for TSN18-N: Width: 30 mm Height: 52.3 mm LED height: 37.1 mm Cable length: 21.8 mm Cable diameter: Ø5.2 Cable length: 2M Mounting hole diameter: 20.7 mm</p>	 <p>Dimensions for TSN18-NK: Width: 30 mm Height: 52.3 mm LED height: 37.1 mm Cable length: 21.8 mm Cable diameter: Ø4.75 Cable length: 15cm Mounting hole diameter: 20.7 mm M12 connector diameter: 17.7 mm</p>
			

Fiber
Photo Sensor
Area Sensor
Ultrasonic Sensors
Inductive Proximity Sensor
Capacitive Proximity Sensor
Timer / Counter
Others
Accessories

TSN

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Fiber
Photo Sensor
Area Sensor
Ultrasonic Sensors
Inductive Proximity Sensor
Capacitive Proximity Sensor
Timer / Counter
Others
Accessories

◆Shape / 外觀 :



◆Specifications / 規格表 :

Output method / 輸出模式	NPN N.O.	TSN28-N	TSN28-NK
	NPN N.C.	-	-
	PNP N.O.	TSN28-P	TSN28-PK
	PNP N.C.	-	-
	NPN N.O./N.C.	-	-
	PNP N.O./N.C.	-	-
	SCR N.O.	-	-
	SCR N.C.	-	-
Sensing Surface / 檢測方向	Top surface / 前方		
Standard sensing object / 標準檢測物	Iron 40 x 40 x 1mm		
Sensing distance / 檢出距離	28 mm		
Secure sensing distance / 建議距離	0 to 22.4 mm		
Hysteresis / 遲滯	≤ 15 % of sensing distance		
Response time / 反應時間	10ms Max.		
Operating voltage / 工作電壓	DC 12 ~ 24V		
Current consumption / 消耗電流	≤ 8 mA no-load		
Load current / 負載電流	100 mA Max at DC 24V		
Leakage current / 漏電流	≤ 1.1 mA no-load		
Residual voltage / 殘餘電壓	≤ DC 1.5V		
Insulation resistance / 隔離阻抗	20MΩ min. (DC500V)		
Voltage withstandability / 絕緣耐壓	AC1000V 60Hz for 60 Sec.		
Operating temperature / 工作溫度範圍	-5 °C ~ +50 °C		
Protection degree / 防水等級	IP 66		IP 66
Wiring method / 出線方式	Pre-wired Ø5.2 x 2M / 3-wires		M12 pigtailed type / M12 接頭15cm 電線式
Weight / 重量	Approx.170g		Approx.118g

◆Dimensions/尺寸圖 :

