



**RIKO OPTO-ELECTRONICS  
TECHNOLOGY CO., LTD.**

COMPANY PROFILE

# Company Presentation

- Since 1989, located at No. 66, Jiansan Road, New Taipei City, its own brand RiKO sensor has been sold worldwide.
- RiKO is professional manufacturer, main products: fiber optic sensor, light sensor, surface sensor, inductive proximity sensor/capacitive sensor, ultrasonic sensor.
- Employees: 150 employees in total

Sales / Administration / R&D



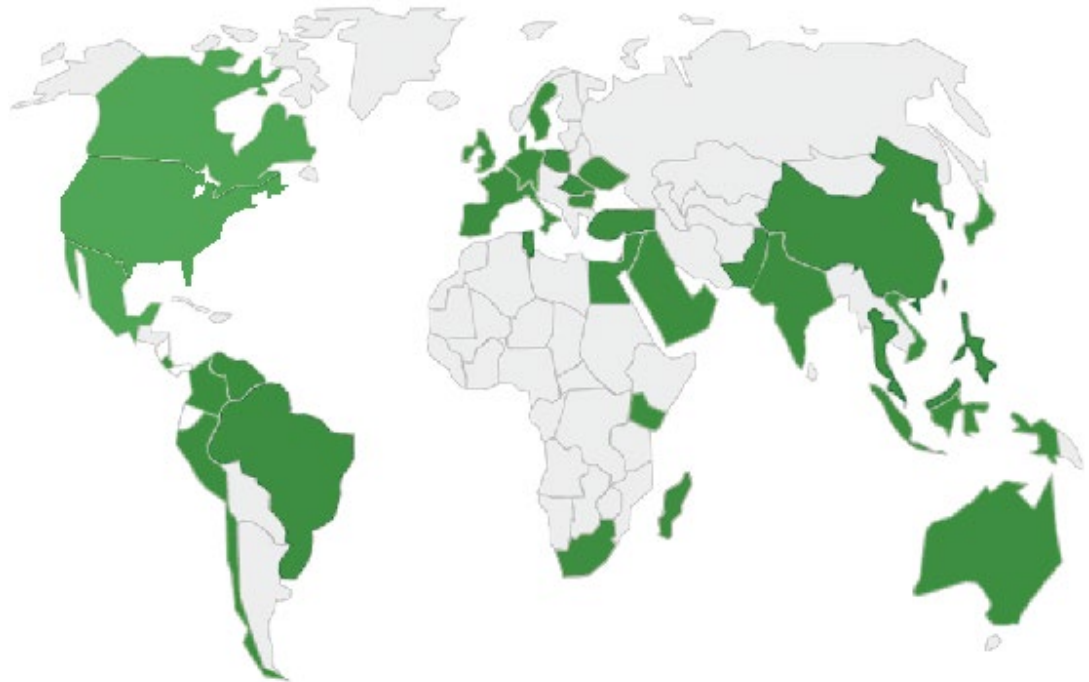
Manufactory



# Business Worldwide :

	Korea		Japan
	Thailand		Germany
	Israel		Egypt
	Malaysia		Colombia
	Philippines		Venezuela
	Singapore		India
	Pakistan		Chile
	Turkey		Belgium
	USA		Italy
	Brazil		Mexico
	Poland		Indonesia
	Romania		
	Switzerland		
	Tunisia		

## Total : over 52 Countries



# Proximity sensor

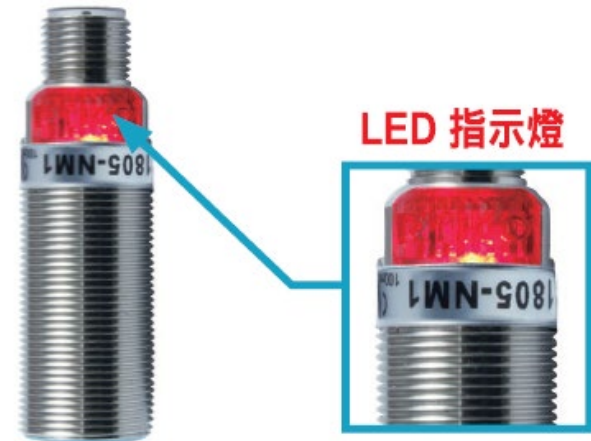
- ✓ Full stainless steel inductive sensor(SU304)
- ✓ Rectangular proximity sensor
- ✓ Tubular proximity sensor
- ✓ Capacitive proximity sensor
- ✓ Inductive ring sensor



# Tubular Proximity Sensor

- Characteristic

- M8 M12 M18 M30 Tubular Size Proximity Sensor
- Shielded / Unshielded
- Wiring method: 2M / plug in connector type
- NP 4 in 1 outputs: NPN/PNP/NO/NC

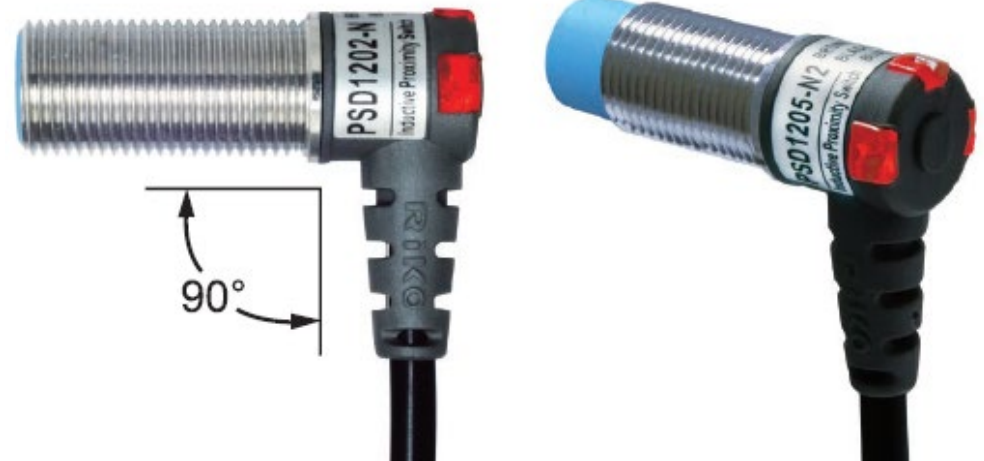


# 90° degree Proximity Sensor

- Characteristic

- 90° degree wiring, saving space

- NP 4 in 1 outputs: NPN/PNP/NO/NC



# Metal Casing Proximity Sensor

- Characteristic

- Metal Casing
- Micro size : 8.5x5.5x25mm
- Single screw hole fixing



# Linear Analog Output Inductive Proximity Sensor

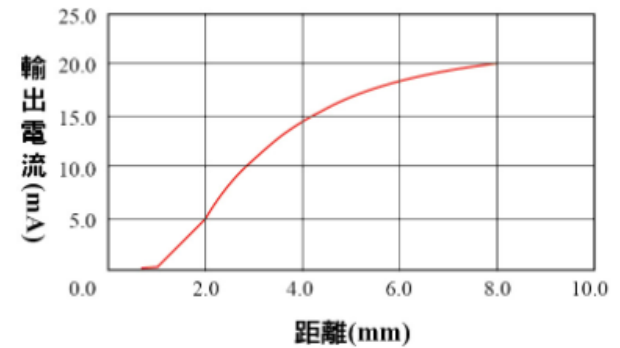
- Characteristic

- Linear output
- 0-10V / 4-20mA
- 90° degree wiring
- Applications: RPM control

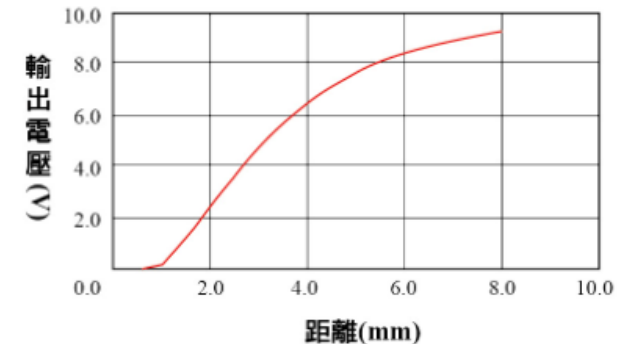


## Response diagrams

PSC1808-LA03



PSC1808-LV03





近接開關傳感器—耐彎抗拉圓管型系列  
Inductive proximity sensor - Tubular Anti-Bending series

品名 (料號) Model Name ( Parts Number)	圖示 Fig.	尺寸 Dimensions	安裝孔徑規格 Thread	規格描述 Specification	電壓/電流 working voltage / consumption current	認證 Certificate
PSC0801-NP		14.8x66mm	M8	檢出距離：1 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
PSC0802-NP		14.8x66mm	M8	檢出距離：2 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
PSD1202-NP		17x40mm	M12	檢出距離：2 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSD1205-NP		17x40mm	M12	檢出距離：5 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSC1202-NP		17x80.5mm	M12	檢出距離：2 mm ±10% Sensing distance: 反應頻率：800 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSC1205-NP		17x80.5mm	M12	檢出距離：5 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 Ma no-load Consumption Current:	CE、RoHS
PSD1805-NP		24x36.4mm	M18	檢出距離：5 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSD1808-NP		24x36.4mm	M18	檢出距離：8 mm ±10% Sensing distance: 反應頻率：500 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSC1805-NP		24x75.5mm	M18	檢出距離：5 mm ±10% Sensing distance: 反應頻率：600 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSC1808-NP		24x75.5mm	M18	檢出距離：8 mm ±10% Sensing distance: 反應頻率：600 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 14 mA no-load Consumption Current:	CE、RoHS
PSC3010-NP		36x80.3mm	M30	檢出距離：12 mm ±10% Sensing distance: 反應頻率：300 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 16 mA no-load Consumption Current:	CE、RoHS
PSC3018-NP		36x80.3mm	M30	檢出距離：18 mm ±10% Sensing distance: 反應頻率：300 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 16 mA no-load Consumption Current:	CE、RoHS

## 近接開關傳感器—方形電感式系列 Inductive proximity sensor - Metal casing rectangular series

品名 (料號) Model Name (Parts Number)	圖示 Fig.	尺寸 Dimensions	規格描述 Specification	電壓/電流 working voltage / consumption current	認證 Certificate
JM02-N		8.5x25mm	檢出距離：2 mm ±10% Sensing distance: 反應頻率：1000 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JM02-P		8.5x25mm	檢出距離：2 mm ±10% Sensing distance: 反應頻率：1000 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JMD02-N		8.5x25mm	檢出距離：2 mm ±10% Sensing distance: 反應頻率：1000 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JMD02-P		8.5x25mm	檢出距離：2 mm ±10% Sensing distance: 反應頻率：1000 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JM04-N3		12x30.5mm	檢出距離：4 mm ±10% Sensing distance: 反應頻率：700 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JM04-P3		12x30.5mm	檢出距離：4 mm ±10% Sensing distance: 反應頻率：700 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JMD04-N3		12x30.48mm	檢出距離：4 mm ±10% Sensing distance: 反應頻率：700 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS
JMD04-P3		12x30.48mm	檢出距離：4 mm ±10% Sensing distance: 反應頻率：700 Hz Switching frequency:	工作電壓：DC12 ~ 30 V Working Voltage: 消耗電流：≤ 8 mA no-load Consumption Current:	CE、RoHS

- Proximity sensor replaces the contact detection method such as limit switch. Any sensor that detects without contacting the detection target is commonly referred to as Proximity sensors

## □ Principle :

Among them, the detection method of the inductive proximity sensor is to make the detection coil generate a magnetic field, and the detection is performed by the impedance change caused by the eddy current in the metal detection object. It can convert the movement information or presence information of the detected object into electrical signals. Inductive Proximity Sensor usually used to detect conductors such as metals (iron, aluminum, copper, ... etc.).

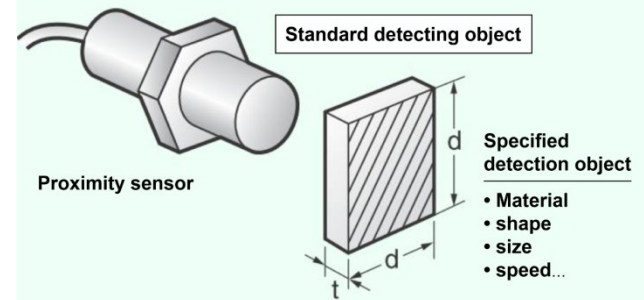
## □ Advantages of inductive proximity sensors:

1. The detection is performed in a non-contact manner, which will not wear out or damage the detection object .
2. Non-contact detection, not affected by contact life, increase product life.
3. It is suitable to use no matter the detection object is at any circumstances. Our sensors can detect even if there is oil , dirt or water on the detecting object .
4. Compared with the contact switch, it can have a faster response speed.
5. Not affected by the surface color of the detected object.

# Introduction to Proximity Sensors :

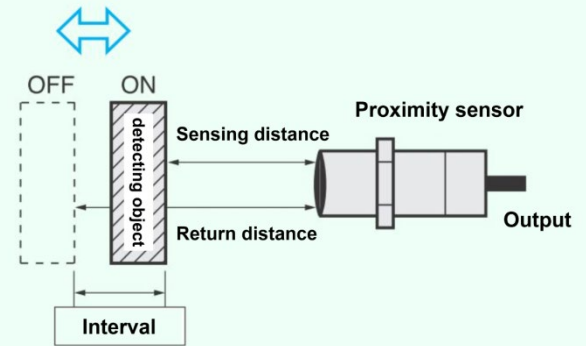
## ◆ Standard Detecting substance :

There are some measuring standard for detection object depends on material, quality, shape and size.



## ◆ Sensing distance :

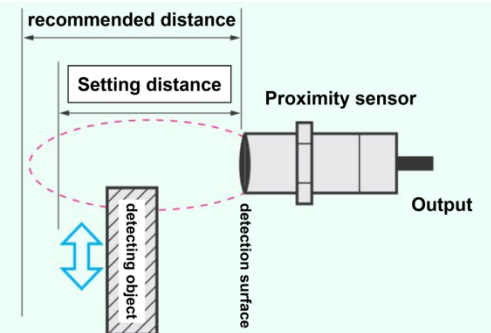
Move the standard detection object according to the specified method, From the reference position (reference distance) to Measuring Distance(return)



## ◆ Setting distance:

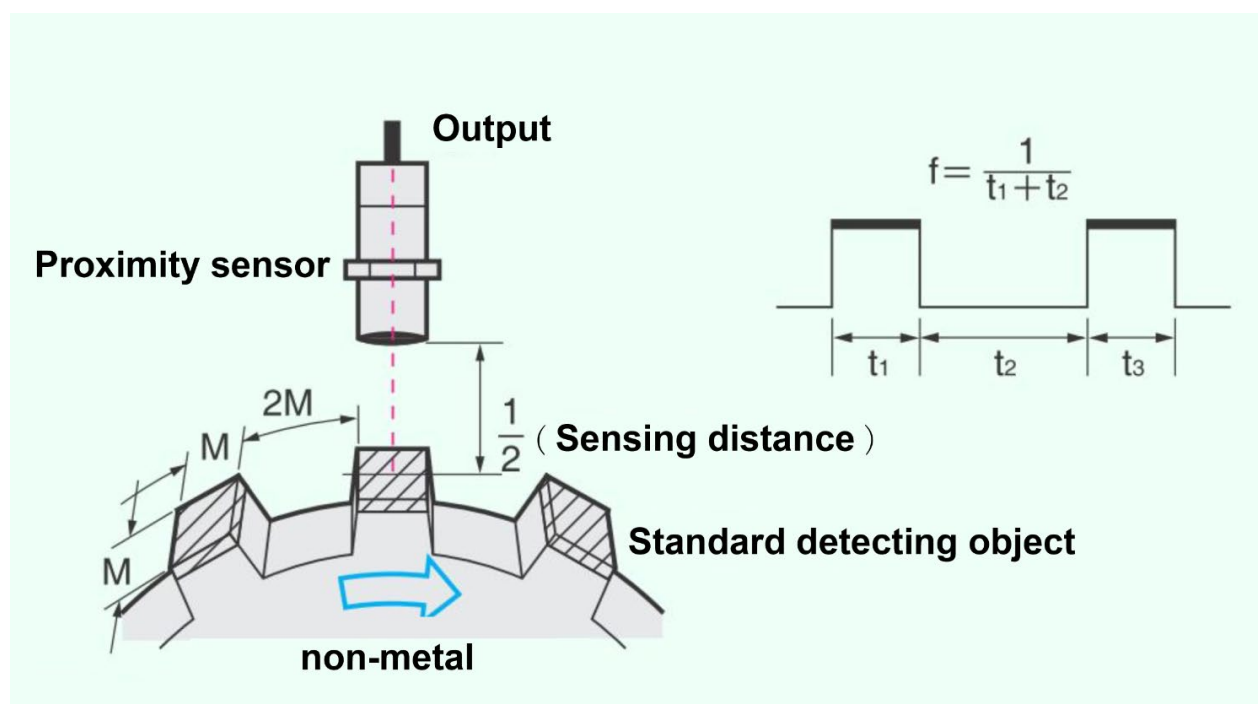
Including the influence of temperature and voltage,

The most stable position is to detect 70-80% of the detection distance which is the interval between the detection surface (Standard) and the place the detecting objects passing by.



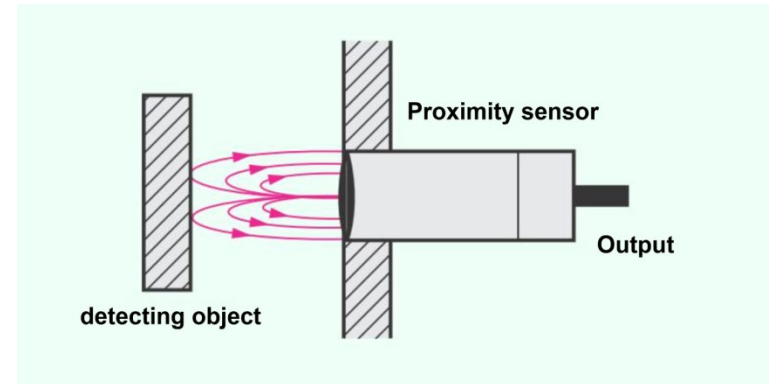
## □ Response frequency

- When the standard object is used to detect the reverse contact approach, the number of detection times that can be output per second.
- Please refer to the attached figure for the outline of the measurement method.



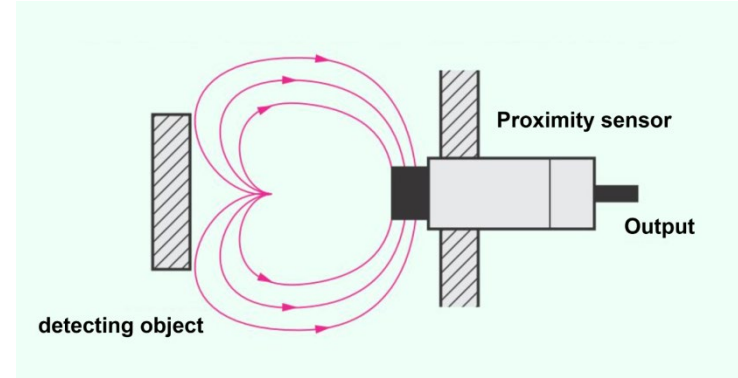
## □ Shielded

- The magnetic flux is concentrated in front of the sensor, and the side of the detection coil is covered with metal.
- The sensor can be completely installed in metal.



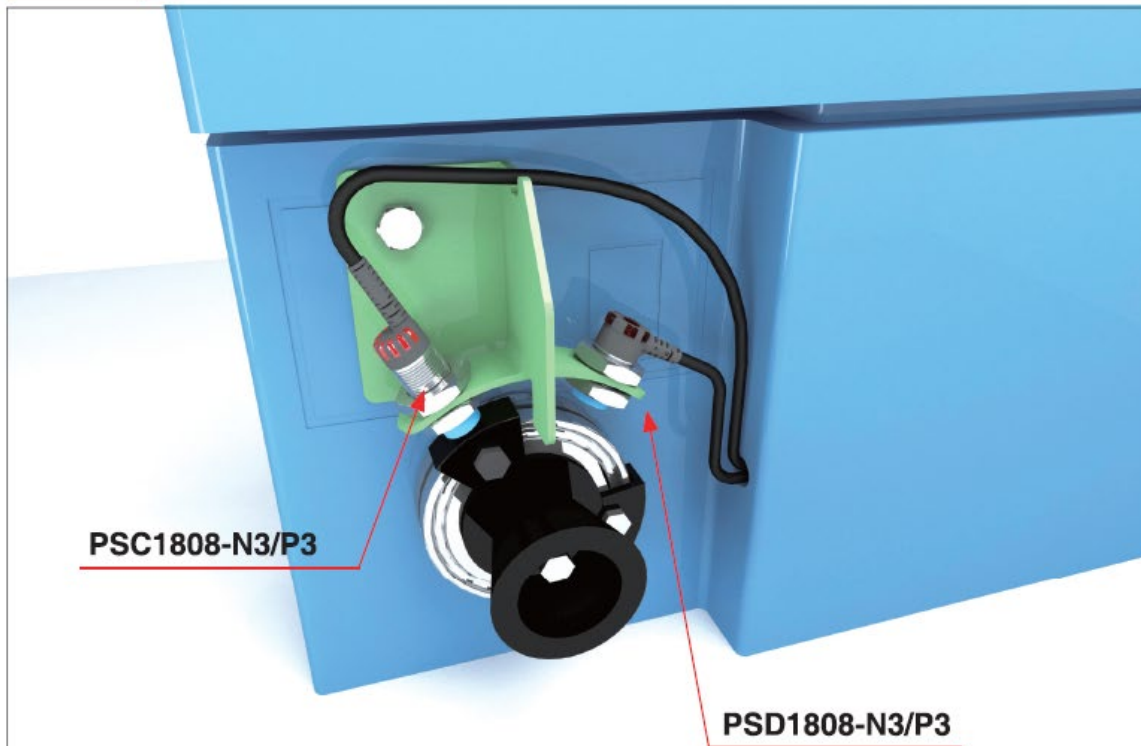
## □ Unshielded

- The type of product where the magnetic flux is decomposed in front of the sensor, and the side of the detection coil is not covered by a metal case.
- Since it is easily affected by the surrounding metal (magnet), care must be taken when selecting the installation location.



## I006 馬達來回轉動定位 / Motor rotational positioning.

103 / 102頁



### 型號 / Model

PSC1808-N3/P3  
PSD1808-N3/P3

### 檢知條件 / Application

18x18mm 感應鐵塊固定於轉動軸邊，來回動作定位檢出。

18x18mm iron block fixed to rotate axis edge, back and forth motion positioning detection.

### 產品特性 / Features

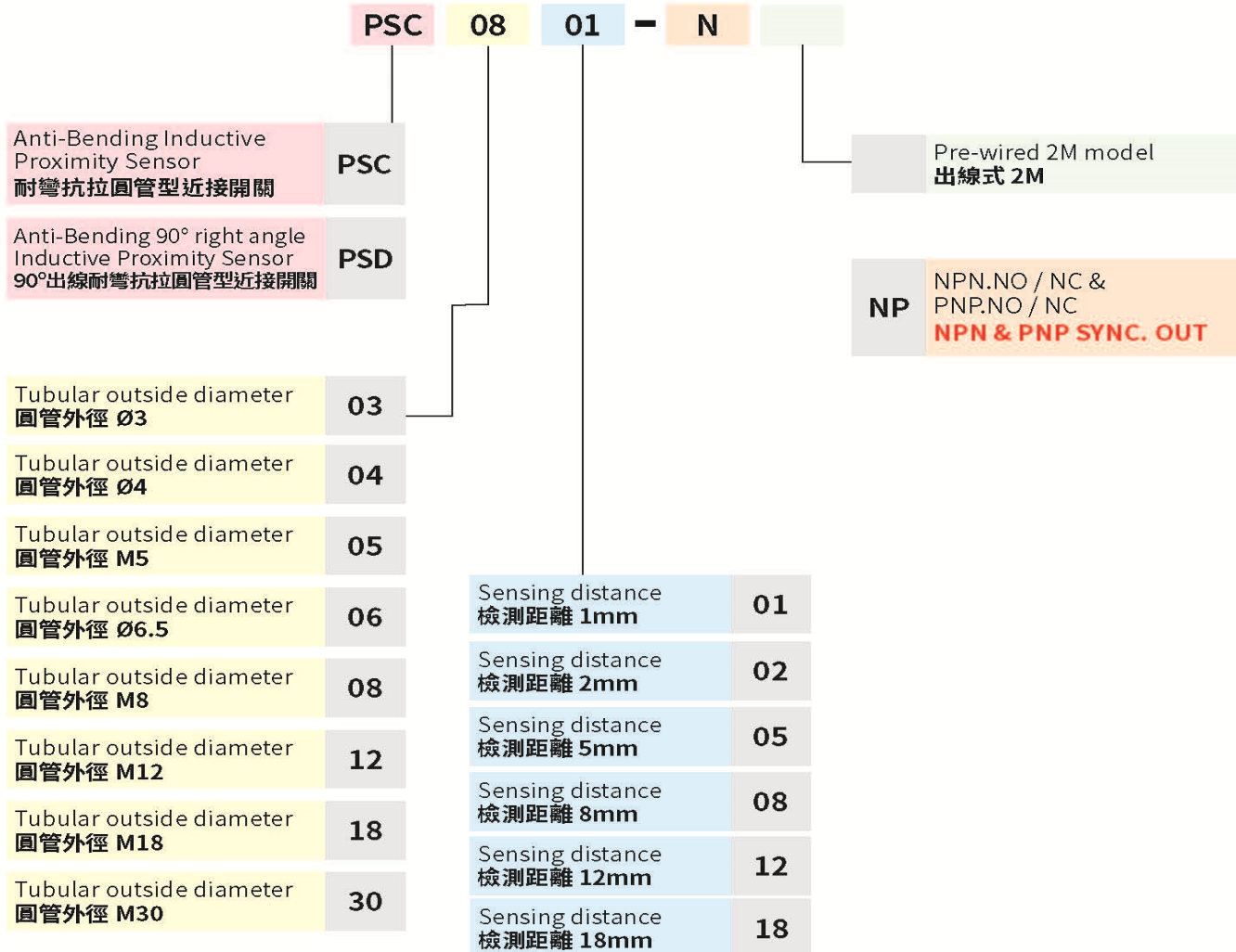
一體成型耐彎保護，IP67防水型近接開關，耐用於各式惡劣環境，創新90°包覆出線設計、270°可見動作指示燈號，方便安裝於狹小空間。

N3/P3 model : NPN N.O./N.C. & PNP N.O./N.C. 2-in-1 outputs. IP67, for outdoor Inferior environment use. anting-bending design, Innovative 90° design, easy Installed in a small space.

## OPTIONS

## 圓管型近接開關

### 訂貨索引

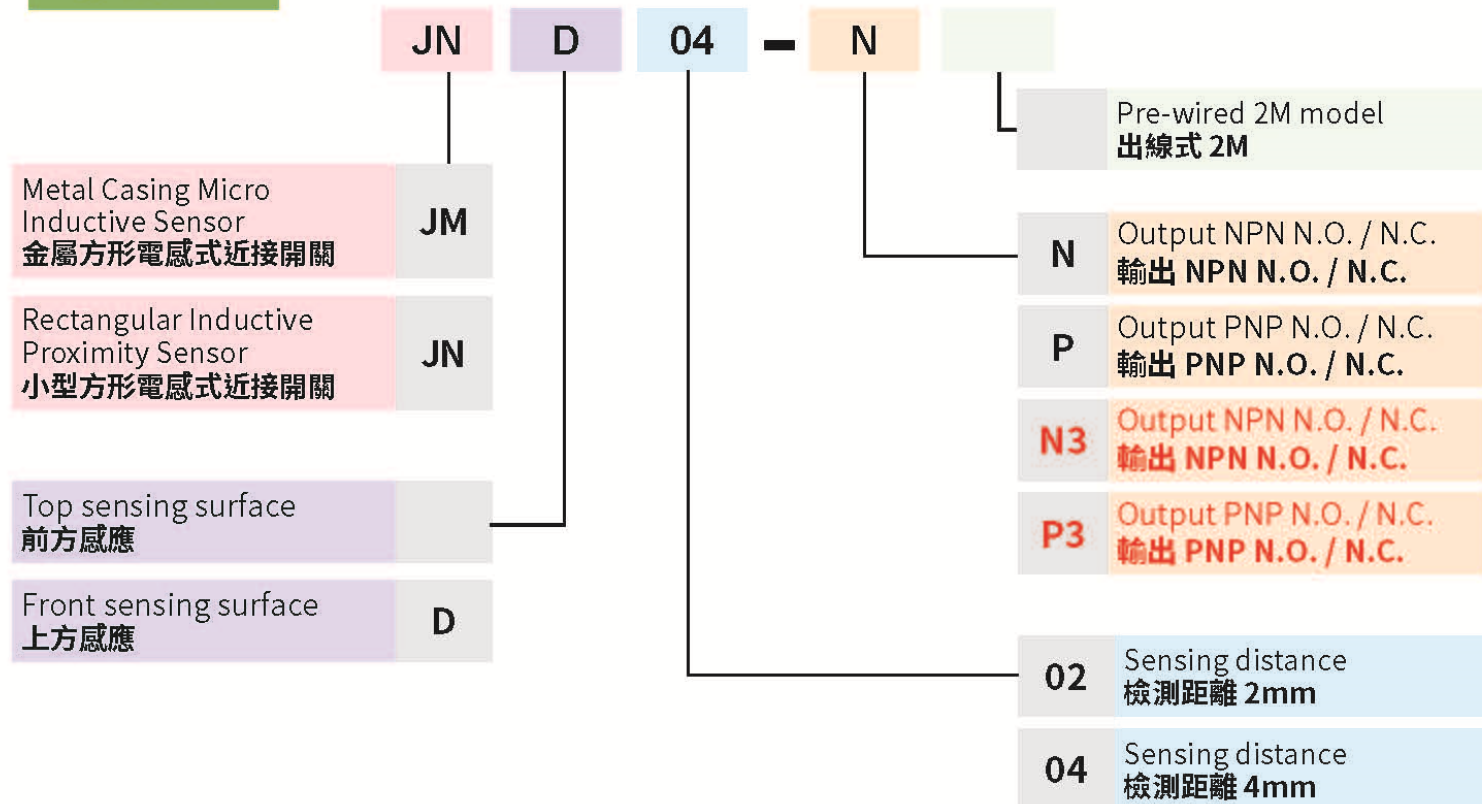




## 方形電感式近接開關

## OPTIONS

### 訂貨索引



Please access <http://www.riko.com> for home page of RiKO.

~ Thank You ~

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