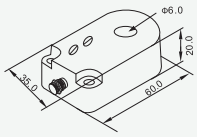
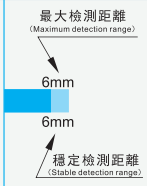
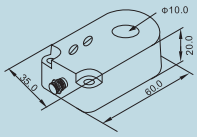
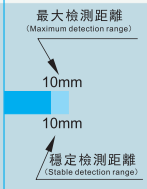
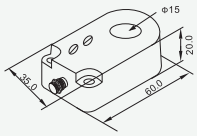
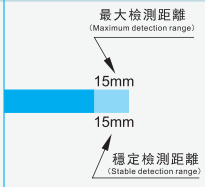
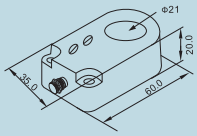
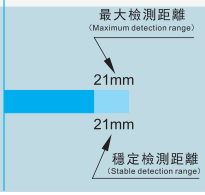
環形接近開關
(Ring proximity switches)

可選擇6、10、15、21mm環的接近開關。
6,10,15,21 mm ring proximity switch can be selected。

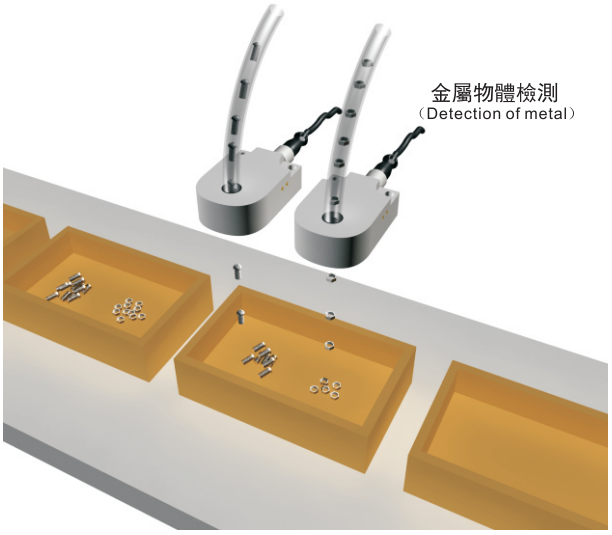
- FSNA06-N最小檢測物體可達1mm;
  FSNA06-N minimum detectable object up to 1mm
- 標準檢測物為鐵和鋼;
  Detection of standards for the iron and steel
- 產品帶M12連接器;
  Products with M12 connector
- 產品檢測性能穩定;
  Product have a stable performance

Procurement guide/訂購指南

Category 類別	Model 型號	detection mode 檢出方式	detection distance 檢測距離	detect the smallest objects 檢測最小物體	entry cable 出線方式
	FSNA06-N/D FSNA06-P/D			2.0×3.0×1 (iron)	M12 4芯線 (M12,4-pins)
	FSNA10-N/D FSNA10-P/D			5.0×4.0×1 (iron)	M12 4芯線 (M12,4-pins)
	FSNA15-N/D FSNA15-P/D			4.0×3.0×1 (iron)	M12 4芯線 (M12,4-pins)
	FSNA21-N/D FSNA21-P/D			12.0×6.0×1 (iron)	M12 4芯線 (M12,4-pins)

可定制PUR柔軟線，尾部加W。
PUR soft line can be customized, the rear plus W.

Application/ 應用實例



金屬物體檢測
(Detection of metal)

不同孔徑可選擇
(Different hole size)

光纖傳感器 (Fiber Optic Sensors)
光纖管 (Fiber optic tube)
光纖聚焦鏡 (Fiber Focus Lens)
接近開關 (Proximity switches)
光電開關 (Photoelectric switch)
標籤傳感器 (Label sensor)
光幕傳感器 (Light curtain)
激光對準線 (Laser alignment)
壓力傳感器 (Pressure sensor)
磁性開關 (Magnetic switch)
連接器 (Connector)
激光傳感器 (Laser Sensor)
色標傳感器 (Color sensors)
激光位移傳感器 (Laser displacement sensor)
導軌式電源 (Rail Power Supplies)
固態繼電器 (Solid State Relay)

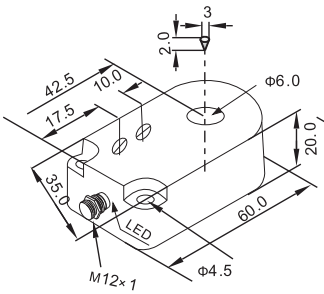
■Specifications/規格表

Model/型號 / Specifcations/規格表	FSNA06-N/D FSNA06-P/D	FSNA10-N/D FSNA10-P/D	FSNA15-N/D FSNA15-P/D	FSNA21-N/D FSNA21-P/D
Scanning distance/檢出距離	1mm	2mm	3mm	4mm
Response friquwncy/ 反應頻率	1KHz	1KHz	1KHz	1KHz
Test object Material/檢測物材质	鐵、鋼（iron）	鐵、鋼（iron）	鐵、鋼（iron）	鐵、鋼（iron）
Hysteresis/ 磁帶	2%	2%	2%	2%
Operating voltage/工作電壓	10~30VDC	10~30VDC	10~30VDC	10~30VDC
Current consumption/消耗電流	＜15mA	＜15mA	＜15mA	＜15mA
Load current/負載電流	＜200mA	＜200mA	＜200mA	＜200mA
Leakage current/漏電流	≤10uA	≤10uA	≤10uA	≤10uA
Residual voltage/ 殘餘電壓	≤1.5V at 200mA	≤1.5V at 200mA	≤1.5V at 200mA	≤1.5V at 200mA
Operating temperature/工作溫度範圍	-25℃~70℃	-25℃~70℃	-25℃~70℃	-25℃~70℃
Material/外觀材質	PVC	PVC	PVC	PVC
Wiring method/出線方式	M12 4芯線	M12 4芯線 (4-Pins)	M12 4芯線 (4-Pins)	M12 4芯線 (4-Pins)
Protection degree/ 防水等級	IP 67	IP 67	IP 67	IP 67
EMC/电磁兼容性	220~280mA	220~280mA	220~280mA	220~280mA

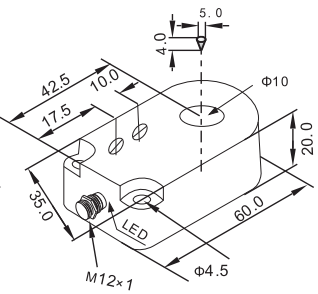
可定制PUR柔軟線，尾部加W。
PUR soft line can be customized, the rear plus W.

■DiMensions/外形尺寸圖（單位：mm）

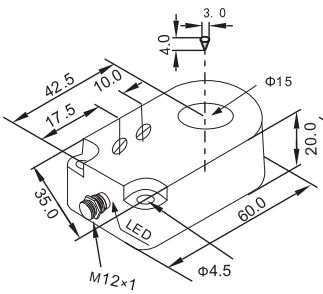
FSNA06-N/D P/D



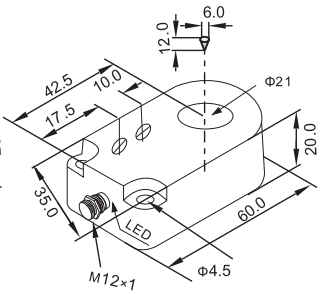
FSNA10-N/D P/D



FSNA15-N/D P/D

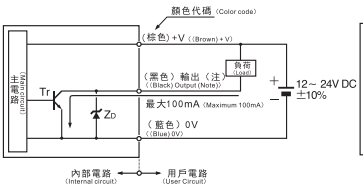


FSNA21-N/D P/D

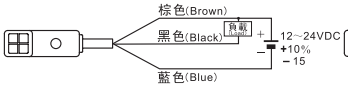


■Wiring schemes/接線圖

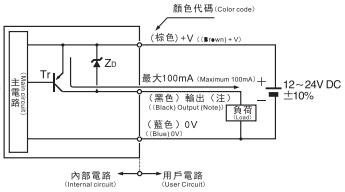
NPN. NO/NPN. NC



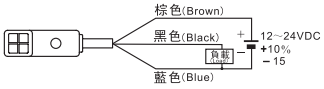
接線圖 (Wiring diagram)



PNP. NO/PNP. NC



接線圖 (Wiring diagram)



引腳佈局 (Blue)

1 12-24VDC
2 控制輸出 (Control output)
3 0V

接近開關 (Proximity switch)
小方形接近開關 (Small square proximity switch)
通用方形接近開關 (Universal Square proximity switch)
大方形接近開關 (Large square proximity switch)
環形接近開關 (Annular proximity switch)
小圓形接近開關 (Small round proximity switches)
M8\M12系列接近開關 (M8, M12 series proximity switch)
M8\M12小尺寸接近開關 (M8, M12 small size proximity switches)
M18\M30系列接近開關 (M18, M30 series proximity switch)
超高速型接近開關 (High-speed proximity switch)
長距離檢測接近開關 (Long-range detection proximity switch)
高重複精度接近開關 (High repeatability proximity switch)
連接器接近開關 (Connector proximity switch)
全不銹鋼外殼接近開關 (All stainless steel proximity switch)
只檢測鐵鋼接近開關 (Steel proximity switch detects only)
塑料外殼接近開關 (Plastic shell proximity switch)
靜電容式接近開關 (Capacitive proximity switches)
液體檢測接近開關 (Liquid level detection proximity switch)