

F&C[®] Photoelectric type

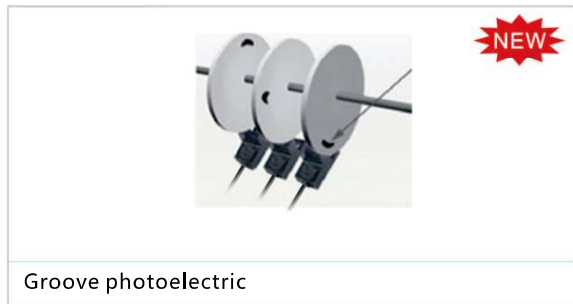
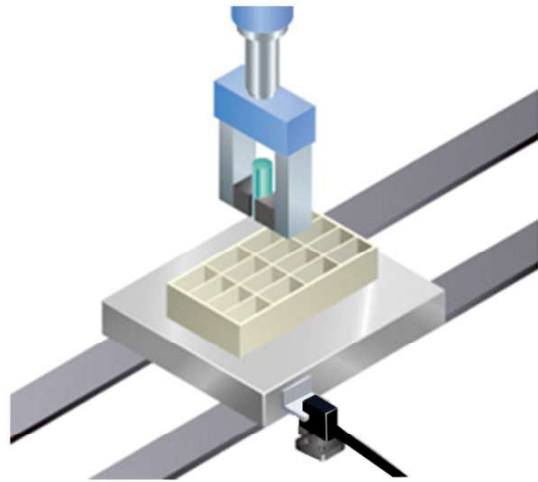
FC-SPX200/FC-SPS200 Series slot photoelectric switch

New



Application

Detection speed



<http://www.fctaiwan.com>

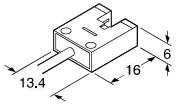
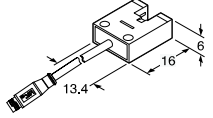
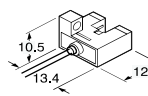
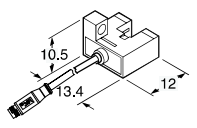
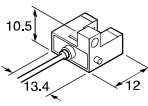
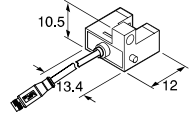
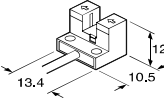
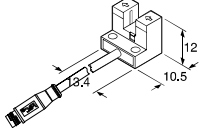
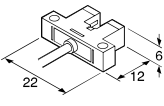
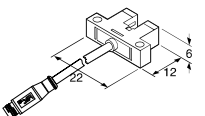
Get more information on F&C sensor technology and developments



Official WeChat



Technical Support

Installation method	Type	Outlook	Sensing distance	Model		Light souatus LED	Connecting method
				NPN	PNP		
Through beam	small groove		5mm	FC-SPX201 NO.NC	FC-SPX201P NO.NC	Infrared LED	Φ2.8 × 2M/4-wires
			5mm	FC-SPX201/15D NO.NC	FC-SPX201P/15D NO.NC	Infrared LED	Φ2.8Lead 150mm with M8 connector
			5mm	FC-SPX202 NO.NC	FC-SPX202P NO.NC	Infrared LED	Φ2.8 × 2M/4-wires
			5mm	FC-SPX202/15D NO.NC	FC-SPX202P/15D NO.NC	Infrared LED	Φ2.8Lead 150mm with M8 connector
			5mm	FC-SPX203 NO.NC	FC-SPX203P NO.NC	Infrared LED	Φ2.8 × 2M/4-wires
			5mm	FC-SPX203/15D NO.NC	FC-SPX203P/15D NO.NC	Infrared LED	Φ2.8Lead 150mm with M8 connector
			5mm	FC-SPX205 NO.NC	FC-SPX205P NO.NC	Infrared LED	Φ2.8 × 2M/4-wires
			5mm	FC-SPX205/15D NO.NC	FC-SPX205P/15D NO.NC	Infrared LED	Φ2.8Lead 150mm with M8 connector
			5mm	FC-SPX206 NO.NC	FC-SPX206P NO.NC	Infrared LED	Φ2.8 × 2M/4-wires
			5mm	FC-SPX206/15D NO.NC	FC-SPX206P/15D NO.NC	Infrared LED	Φ2.8Lead 150mm with M8 connector

- DR18 Series photoelectric
- DR12 Series photoelectric
- DR08/06 Series photoelectric
- QR Series photoelectric
- CR Series photoelectric
- Analog photoelectric
- BGS Series photoelectric
- HR long diistance photoelectric
- Groove photoelectric
- PJ Sall photoelectric
- JG3 Series laser sensor

FC-SPS200 Series groove photoelectric

Photoelectric sensor

DR18 Series photoelectric

DR12 Series photoelectric

DR08/06 Series photoelectric

QR Series photoelectric

CR Series photoelectric

Analog photoelectric

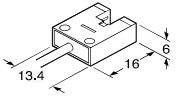
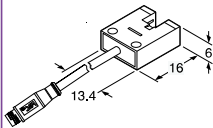
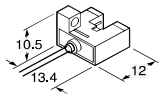
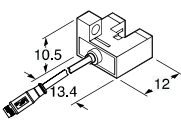
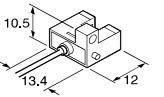
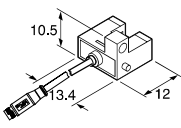
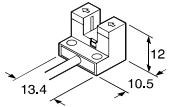
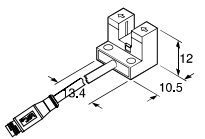
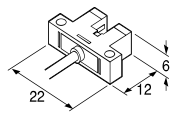
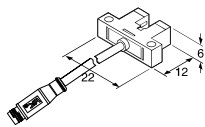
BGS Series photoelectric

HR long distance photoelectric

Groove photoelectric

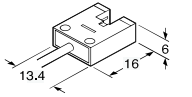
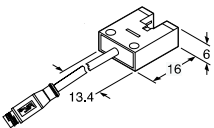
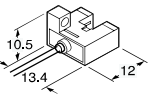
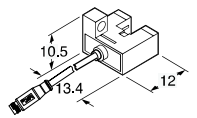
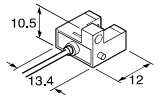
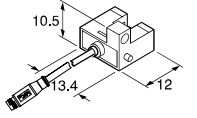
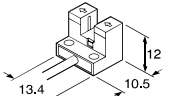
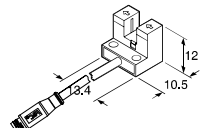
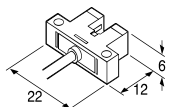
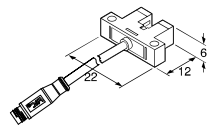
PJ Sall photoelectric

JG3 Series laser sensor

Installation method	Type	Outlook	Sensing distance	Model		Light souatus LED	Connecting method
				NPN	PNP		
Through beam	small groove		5mm	FC-SPS201 FC-SPS201NZ FC-SPS201NZZ	FC-SPS201P FC-SPS201PZ FC-SPS201PZZ	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPS201N/15D FC-SPS201NZ/15D FC-SPS201NZZ/15D	FC-SPS201P/15D FC-SPS201PZ/15D FC-SPS201PZZ/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPS202N	FC-SPS202P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPS202N/15D FC-SPS202NZ/15D FC-SPS202NZZ/15D	FC-SPS202P/15D FC-SPS202PZ/15D FC-SPS202PZZ/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPS203N	FC-SPS203P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPS203N/15D	FC-SPS203P/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPS205N FC-SPS205N2	FC-SPS205P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPS205N/15D FC-SPS205N2/15D	FC-SPS205P/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPS206N NO	FC-SPS206P NO	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPS206N/15D	FC-SPS206P/15D	Infrared LED	Φ2.8x2M/3-wires Lead 150mm with M8 connector

FC-SPV200 Series groove photoelectric

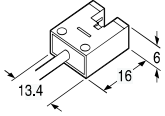
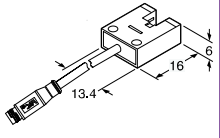
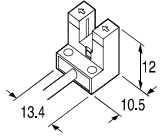
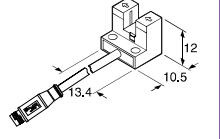
Photoelectric sensor

Installation method	Type	Outlook	Sensing distance	Model		Light souatus LED	Connecting method
				NPN	PNP		
Through beam	small groove		5mm	FC-SPV201	FC-SPV201P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPV201N/15D FC-SPV201NZ/15D FC-SPV201N2Z/15D	FC-SPV201P/15D FC-SPV201PZ/15D FC-SPV201P2Z/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPV202N	FC-SPV202P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPV202N/15D FC-SPV202NZ/15D FC-SPV202N2Z/15D	FC-SPV202P/15D FC-SPV202PZ/15D FC-SPV202P2Z/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPV203N	FC-SPV203P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPV203N/15D	FC-SPV203P/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPV205N FC-SPV205N2	FC-SPV205P	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPV205N/15D FC-SPV205N2/15D	FC-SPV205P/15D	Infrared LED	Φ2.8 × 2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPV206N NO	FC-SPV206P NO	Infrared LED	Φ2.8 × 2M/3-wires
			5mm	FC-SPV206N/15D	FC-SPV206P/15D	Infrared LED	Φ2.8x2M/3-wires Lead 150mm with M8 connector

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- DR12 Series photoelectric
- DR08/06 Series photoelectric
- QR Series photoelectric
- CR Series photoelectric
- Analog photoelectric
- BGS Series photoelectric
- HR long diestance photoelectric
- Groove photoelectric
- PJ Sall photoelectric
- JG3 Series laser sensor

FC-SPV200 Series groove photoelectric

Photoelectric sensor

Installation method	Type	Outlook	Sensing distance	Model	Light souatus LED	Connecting method
				NPN		
Through beam	small groove		5mm	FC-SPV201 FC-SPV201N2Z FC-SPV201NZ	Infrared LED	Φ2.8×2M/3-wires
			5mm	FC-SPV201N/15D FC-SPV201NZ/15D FC-SPV201N2Z/15D	Infrared LED	Φ2.8×2M/3-wires Lead 150mm with M8 connector
			5mm	FC-SPV205N FC-SPV205N2	Infrared LED	Φ2.8×2M/3-wires
			5mm	FC-SPV205N/15D FC-SPV205N2/15D	Infrared LED	Φ2.8×2M/3-wires Lead 150mm with M8 connector

DR18 Series photoelectric

DR12 Series photoelectric

DR08/06 Series photoelectric

QR Series photoelectric

CR Series photoelectric

Analog photoelectric

BGS Series photoelectric

HR long distance photoelectric

Groove photoelectric

PJ Sall photoelectric

JG3 Series laser sensor

FC-SPX200/SPS200/SPV200 series slot photoelectric switch



Photoelectric sensor

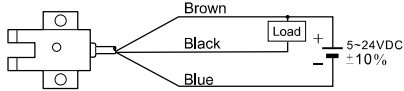
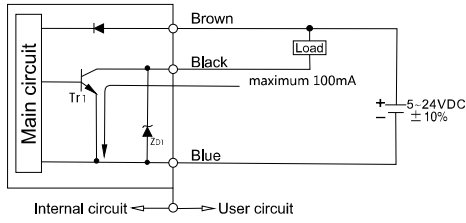
Project	Specification table		
Sensing type	Small groove (Through beam)		
Minimum detection	Opaque object $\Phi 2.0 \times 0.8 \text{mm}$		
Tandard target	Opaque object $\Phi 2.0 \times 0.8 \text{mm}$ or more		
Zero sensitivity adjustment	NO		
Light source	940nm infrared modulated light		
Hysteresis	< 2% Scanning distance		
Operating Voltage	5~24VDC $\pm 10\%$ (SPX/SPV)	24VDC(SPS)	5~12VDC(SPS)
Current consumption	<20mA		
Load current	50mA Max at 12~24VDC	25mA Max at 5VDC	100mA Max at 12~24VDC
Leakage current	<0.01mA No Load		
Residual voltage	<1.5VDC (Load current 50mA, wire 2M)		
Repeatability	< 1% Scanning distance		
Response frequency	500HZ		
Reverse polarity protection	Yes		
Short circuit protection	Yes		
Output type	NPN.NO.NC(SPX/SPV) NPN.NO(SPS) PNP.NO.NC(SPX) PNP.NC(SPS)		
Response time	0.3ms		
Insulation resistance	>20M Ω (Between the charging part and the outer casing)		
Dielectric strength	1000VDC 50~60Hz 1min(Between the charging part and the outer casing)		
Ambient temperature	-10~50°C(Withou icing or condensation)		
Ambient humidity	35~85% Relative humidtuy		
Ambien illumination	Incandescent lamp:2,000LX,sunlight:1,000LX Incandescent lamp(Z): 3,000LX ,sunlight; 2,000LX		
Storage temperature	-20~60°C(Withou icing or condensation)		
Storage humidity	35~95% HR Relative humidtuy		
Protection degree	IP54		
Connection	$\Phi 2.8 \times 2 \text{M} / 2\text{-wires}$ $\Phi 2.8 \times 3 \text{M} / 2\text{-wires}$ $\Phi 2.8 \times 2 \text{M} / 4\text{-wires}$ $\Phi 2.8 \text{Lead } 150 \text{mm with M8 connector}$		
Material	ABS+PC		
Weight	Approx:25g/26g/28g/29g/32g/		

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 JG3 Series laser sensor

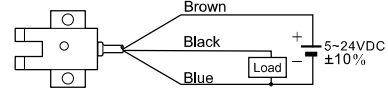
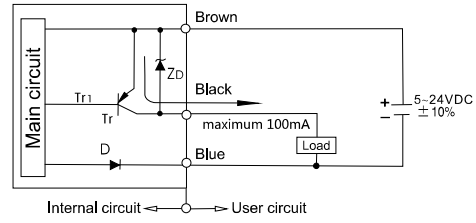
Note: FC-SPX200 series is standard NPN.NO.NC PNP.NO.NC FC-SPV200 series is four-wire standard NPN.NO.NC 5~24VDC optoelectronic products
 The FC-SPS200 series is equipped with a dedicated voltage of 5VDC or 24VDC, commonly used as DC24V, and the output mode NPN.NO PNP.NO has no NC products.

Wiring schemes

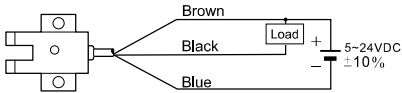
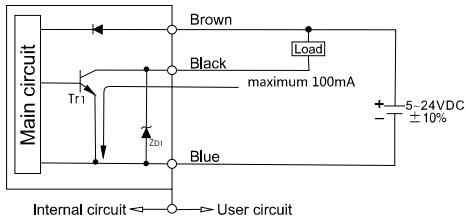
NPN. NO/NPN. NC (SPS series)



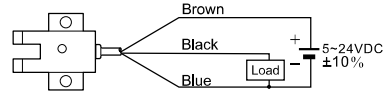
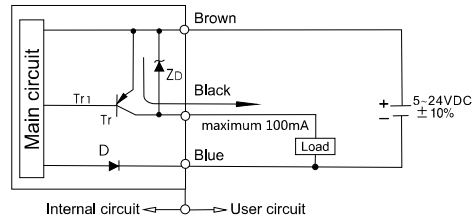
PNP. NO/PNP. NC (SPS series)



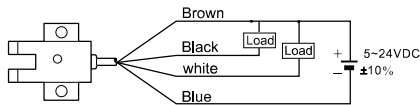
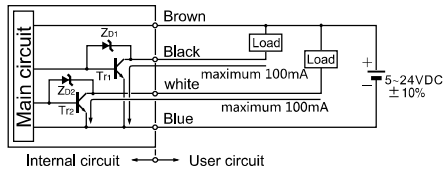
NPN. NO/NPN. NC (SPS series)



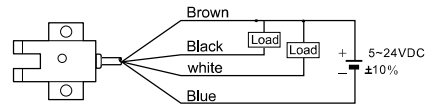
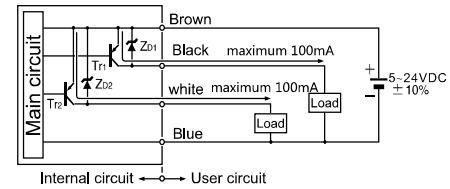
PNP. NO/PNP. NC (SPS series)



NPN.NO.NC (SPX/SPV series)



PNP.NO.NC (SPX series)



Pin layout



M8 four lines

1	Brown
2	Black
3	Blue
4	white



M8 three line

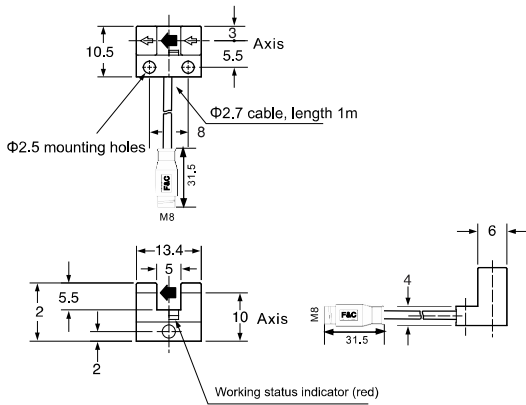
1	Brown
3	Blue
4	Black

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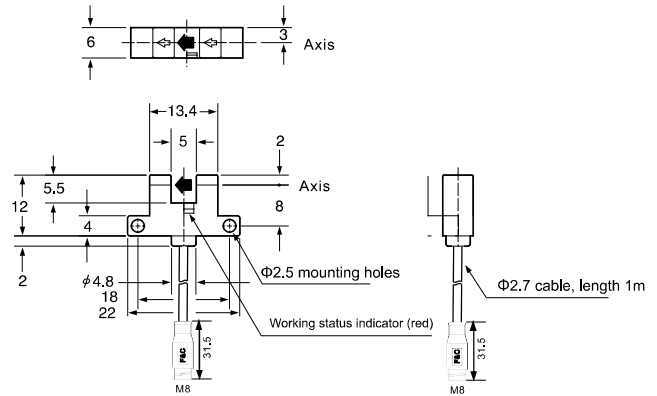
Dimensions

Bent out line with M8 connector (/15D) dimensions

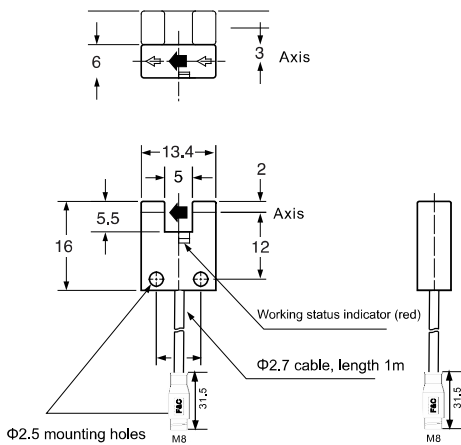
FC-SPX205N/15D P/15D
FC-SPS205N/15D P/15D



FC-SPX206N/15D P/15D
FC-SPS206N/15D P/15D



FC-SPX201N/15D P/15D
FC-SPS201N/15D P/15D



- DR18 Series photoelectric
- DR12 Series photoelectric
- DR08/06 Series photoelectric
- QR Series photoelectric
- CR Series photoelectric
- Analog photoelectric
- BGS Series photoelectric
- HR long distance photoelectric
- Groove photoelectric
- PJ Sall photoelectric
- JG3 Series laser sensor