

F&C[®] Photoelectric type

CR Square photoelectric switch

New



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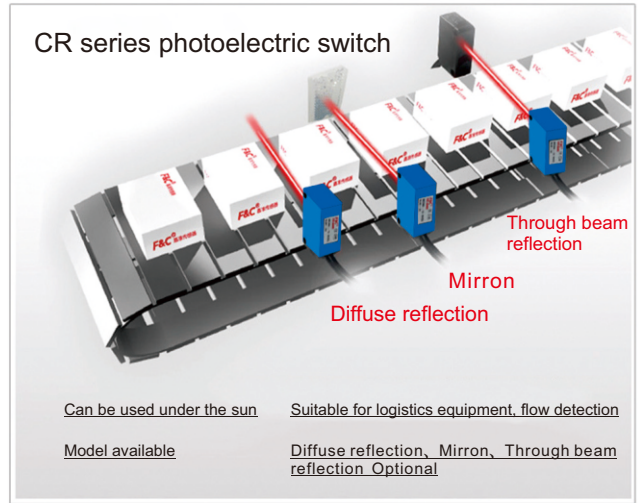
Official WeChat



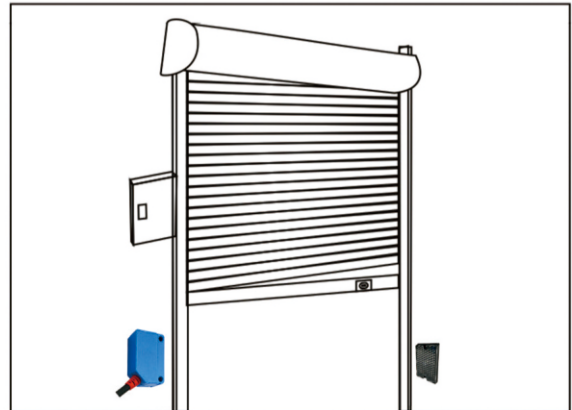
Technical Support

Application

CR series photoelectric switch



Detecting objects passing



CR Series square photoelectric

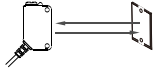
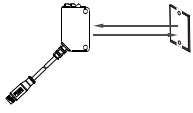
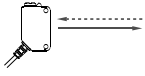
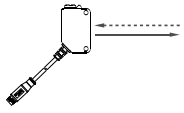
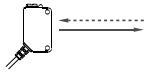
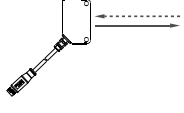
Photoelectric sensor

- 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			10m	CRTI-S1000N R2M	CRTI-S1000P R2M	Infrared LED	Φ4 × 2M/2-wires Φ4 × 2M/3-wires
			10m	CRTI-S1000N/15D	CRTI-S1000P/15D	Infrared LED	Φ4 × 2M/2-wires Φ4 × 2M/3-wires Lead 150mm with M8 connector
			5m	CRTI-S500N R2M	CRTI-S500P R2M	Infrared LED	Φ4 × 2M/2-wires Φ4 × 2M/3-wires
			5m	CRTI-S500N/15D	CRTI-S500P/15D	Infrared LED	Φ4 × 2M/2-wires Φ4 × 2M/3-wires Lead 150mm with M8 connector
Mirron	Small square		2m	CRMR-S200N R2M	CRMR-S200P R2M	Red LED	Φ4 × 2M/3-wires
			2m	CRMR-S200N/15D	CRMR-S200P/15D	Red LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
Diffuse reflection	Small square		1m	CRRI-S100N R2M	CRRI-S100P R2M	Infrared LED	Φ4 × 2M/3-wires
			1m	CRRI-S100N/15D	CRRI-S100P/15D	Infrared LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
			40cm	CRRI-S40N R2M	CRRI-S40P R2M	Infrared LED	Φ4 × 2M/3-wires
			40cm	CRRI-S40N/15D	CRRI-S40P/15D	Infrared LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
			10cm	CRRI-S10N R2M	CRRI-S10P R2M	Infrared LED	Φ4 × 2M/3-wires
			10cm	CRRI-S10N/15D	CRRI-S10P/15D	Infrared LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector

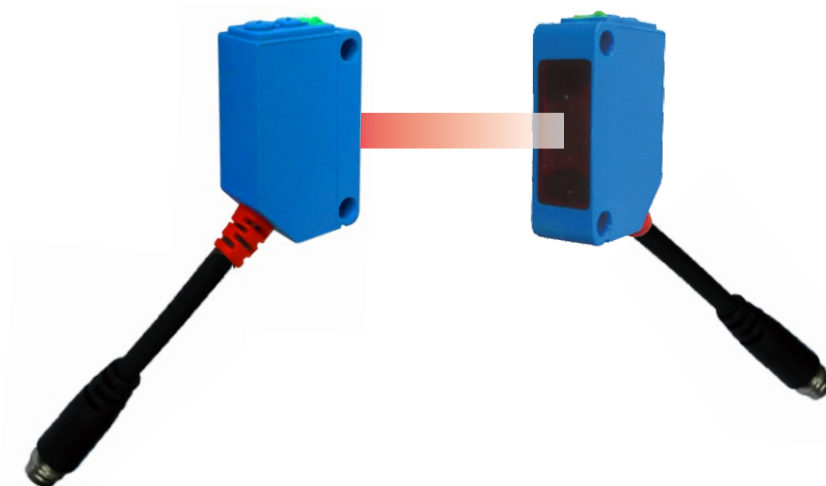
CR Series square photoelectric

Photoelectric sensor

Installation method	Type	Outlook	Sensing distance	Model		Light souatus LED	Connecting method
				NPN	PNP		
Mirron	Small square		2m	CRMI-S200N R2M	CRMI-S200P R2M	Infrared LED	Φ4 × 2M/3-wires
			2m	CRMI-S200N/15D	CRMI-S200P/15D	Infrared LED	Φ4 × 2M/3-wires Lead 150mm with M8 connector
Mirron	Small square		40cm	CRRR-S40N	CRRR-S40P	Red LED	Φ4 × 2M/3-wires
			40cm	CRRR-S40N	CRRR-S40P	Red LED	Φ4 × 2M/3-wires
			10cm	CRRR-S10N	CRRR-S10P	Red LED	Φ4 × 2M/3-wires
			10cm	CRRR-S10N	CRRR-S10P	Red LED	Φ4 × 2M/3-wires

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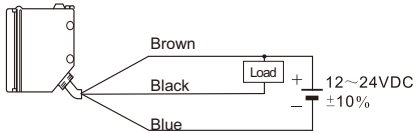
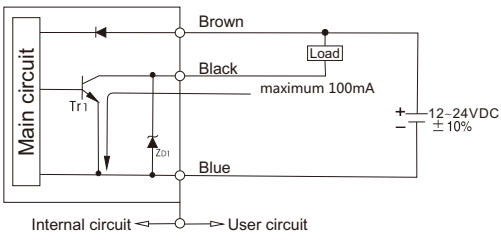


Project	Specification table
Sensing type	Through beam reflection
Minimum detection	Opaque object $\Phi 3.0 \times 0.8 \text{mm}$
Tandard target	Opaque object $\Phi 5.0 \times 0.8 \text{mm}$ or more
Zero sensitivity adjustment	Yes
Light source	940nm infrared modulated light
Hysteresis	< 15% Scanning distance
Operating Voltage	12~24VDC $\pm 10\%$ impulse (P-P) 10%
Current consumption	< 20mA
Load current	100mA
Leakage current	< 0.01mA No Load
Residual voltage	< 1.5VDC (Load current 50mA, wire 2M)
Repeatability	< 1% Scanning distance
Response frequency	300HZ
Reverse polarity protection	Yes
Short circuit protection	NO
Output type	NPN.NO/NPN.NC PNP.NO/PNP.NC
Response time	0.5ms
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 $^{\circ}\text{C}$ (Withou icing or condensation)
Ambient humidity	35~85% Relative humidtuy
Ambien illumination	Sunlight: 2,000LX , Light: 1,000LX
Storage temperature	-20~60 $^{\circ}\text{C}$ (Withou icing or condensation)
Storage humidity	35~95% HR Relative humidtuy
Protection degree	IP54
Connection	$\Phi 4 \times 2 \text{M} / 2\text{-wires}$ $\Phi 4 \times 2 \text{M} / 3\text{-wires}$ $\Phi 4$ Lead 150mm with M8 connector
Material	PBT+PC
Weight	Approx: 45.5g/46g/46.5g/47.5g/55g/60g/86g/87g

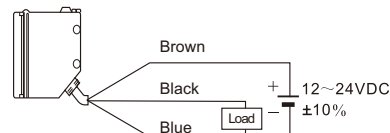
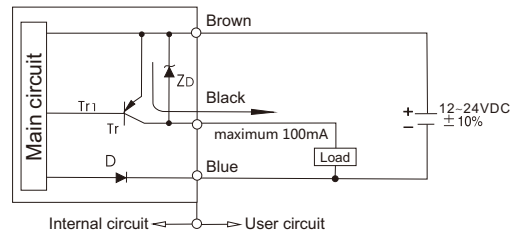
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Wiring schemes

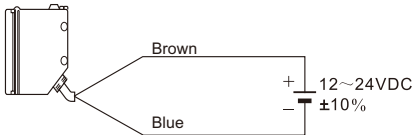
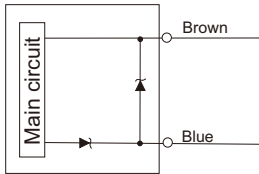
NPN. NO/NPN. NC



PNP. NO/PNP. NC



Emission



Pin layout

