

C4 series

Machine Safety Devices

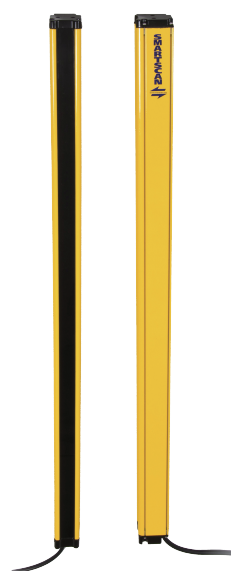
Applications

- Press brakes
- Power presses
- Mechanical presses
- Robotic work cells
- Process lines
- Wood working machines
- Guillotines
- Metal folding machines

Introduction

C4 series safety light curtains meet the highest requirements of the latest international safety standards such as ISO13849-1 PL e level and the IEC62061 safety Level SIL3 , also in line with the demand of the light curtain international standards IEC61496-1, IEC61496-2 the highest grade TYPE 4 .They approved the and verification by the third verification ports over Europe and got the certification. Its safety performance and level can be adapted for all kinds of dangerous machinery such as punching, the cutting, folding machines and other working machinery, to meet the various safety standards.

C4 series safety light curtains use the latest electronic and mechanical manufacturing technology, small and strong exterior structure, durable and lower price compared with the same level products; many models and specifications to meet the various safety detection of operators fingers, palms, arms or body's..



Features

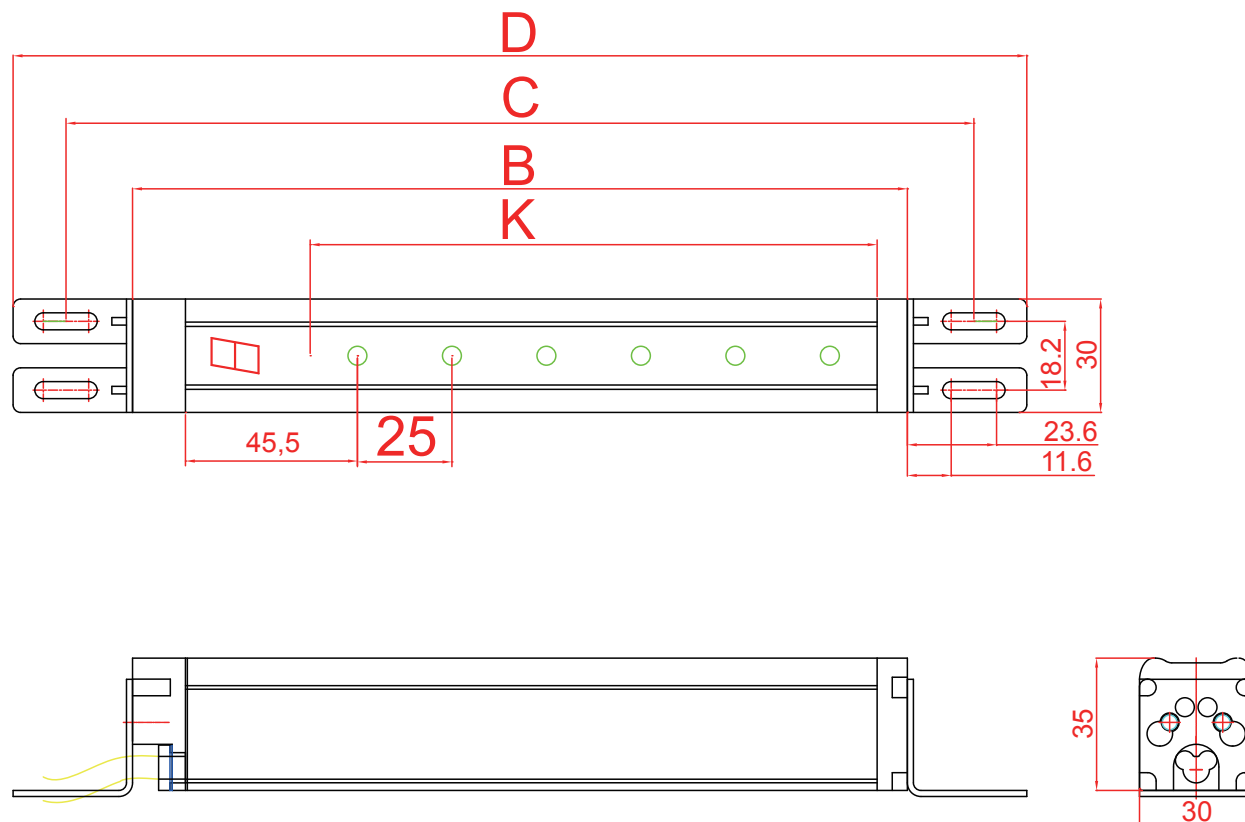
- Appearance small size suitable for machinery simplify design requirements, strong mechanical structure no extra agency support is necessary.
- IEC61496-1/-2 TYPE4
- Various type, 30mm 、 40mm object detection.
- Built-in auto-reset and manual reset function. With the received signal strength indicator light curtain seven segment display (can be used with light curtain in the vertical direction Installation location, set the font direction).
- Variety of interfaces, which connect to safety module
- Easy installation alignment and regulation

Specification

Specification	
Pitch	25mm
Number of beams	2~96
Object detection	30mm 40mm
Detection zone	180mm ~ 2430mm 190mm ~ 2440mm
Range	0.5m ~ 5m 4m ~ 10m
Response time	20msec
Classification	IEC61496-1 & IEC61496-2 · TYPE 4
Power supply	24VDC ± 20% · 1.5A (MAX)
Current consumption	500mA + (OSSD current consumption)
Output	OSSD1 & OSSD2 (24 VDC / 500mA Solid-state Electronic), Synchronization output
Appearance	Aluminum ; yellow coating
Connector	Direct appear (black line), the standard cable length 3M (or line length 5M optional)
Operating temperature	0°C to +50°C
Enclosure rating	IP65

Order Guide

Detection Capability : 30mm			Detection Capability : 40mm				
Range : 0.5m to 5m			Range : 4m to 10m				
Beam	Model	Detection zone (k) (mm)	Model	Detection zone (k) (mm)	Overall Length(B) (mm)	Install Length(C) (mm)	Assembly Length(D) (mm)
6	030-301	180	030-401	190	205	240	270
12	030-302	330	030-402	340	355	390	420
18	030-303	480	030-403	490	505	540	570
24	030-304	630	030-404	640	655	690	720
30	030-305	780	030-405	790	805	840	870
36	030-306	930	030-406	940	955	990	1020
42	030-307	1080	030-407	1090	1105	1140	1170
48	030-308	1230	030-408	1240	1255	1290	1320
54	030-309	1380	030-409	1390	1405	1440	1470
60	030-310	1530	030-410	1540	1555	1590	1620
66	030-311	1680	030-411	1690	1705	1740	1770
72	030-312	1830	030-412	1840	1855	1890	1920
78	030-313	1980	030-413	1990	2005	2040	2070
84	030-314	2130	030-414	2140	2155	2190	2220
90	030-315	2280	030-415	2290	2305	2340	2370
96	030-316	2430	030-416	2440	2455	2490	2520



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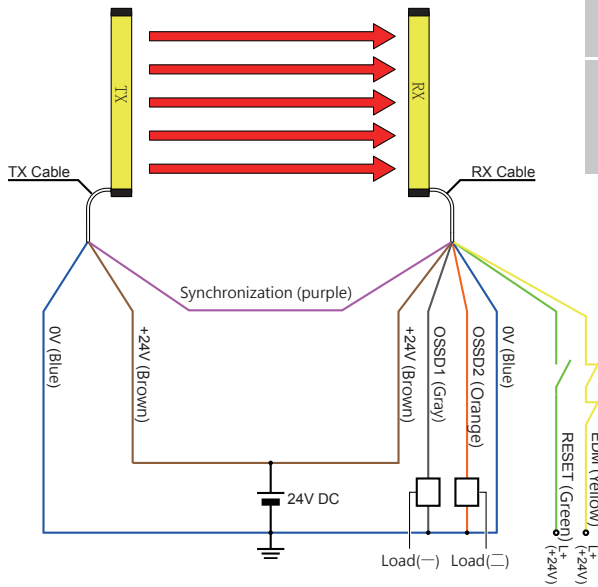
Status indicators

TX			RX		
Status indicators	Description		Status indicators	Description	
	7 segment display (1)	Real-time displays provide instant infrared signal receiving intensity light curtain receiver end, When the light curtain can be installed as an auxiliary installed positioning reference. Character display 0 ~ 9, F, 0 represents the minimum reception signal, F represents the maximum access The received signal.		ON	ON LED is green, Under normal operating conditions, all of the beams is clear, ON LED will be lighted, OSSD1 and OSSD2 output On state. If you have the beam is blocked when, ON LED will off.
	7 segment display (2)	Display the current operating state of the light curtain, A total of six groups of light curtain status code action to assist technicians installed correctly curtains. Detailed code content and significance, see the product brochures and other technical manuals file.		EDM	EDM SIGNAL yellow LED. EDM ON monitors the input state is, EDM LED will be light. EDM OFF state monitoring input is, EDM LED will off.
		OFF		OFF LED is red, When the OFF LED lighted, the first represents the supply side of the external power supply RX light curtain normal power supply; The second represents the light curtain if the beam is blocked, OSSD1 and OSSD2 output is Off. When the OFF LED is off, the light curtain beams is cleared light curtain sensing is normally.	
		CLEAR		CLEAR SIGNAL yellow LED. When CLEAR LED is ON, the light curtain installation and accurate alignment. When CLEAR LED is off, the light curtain alignment deviation.	

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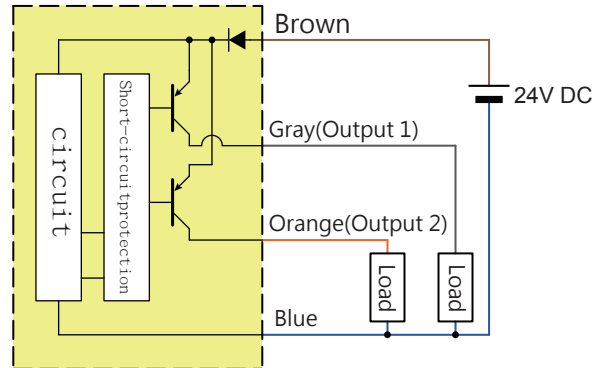
Input and output circuits

Manual reset mode

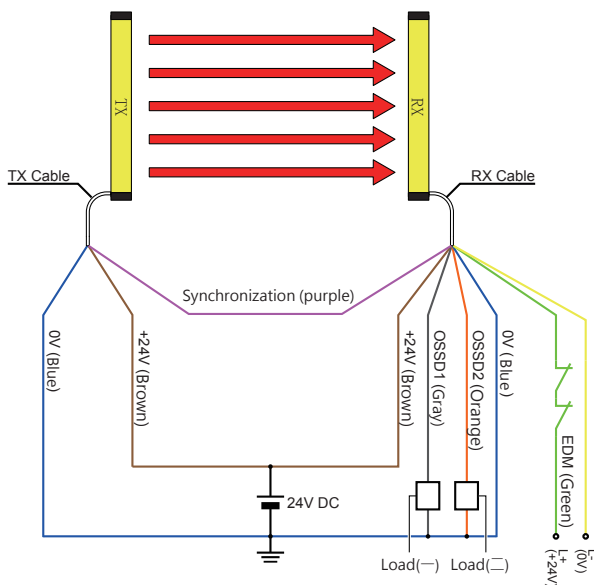


- (1) Power : Vin +24V DC transmitter and receiver(Brown+24V · Blue 0V), we suggest using independently power install module. It could avoid surging; Ferrite core installs in RX and case connects with Gnd ·
- (2) Output : Two groups of transistor(PNP) signal output OSSD1 and OSSD2 ; DC+24V during light curtain normal operation.

PNP output mode



Automatic reset mode



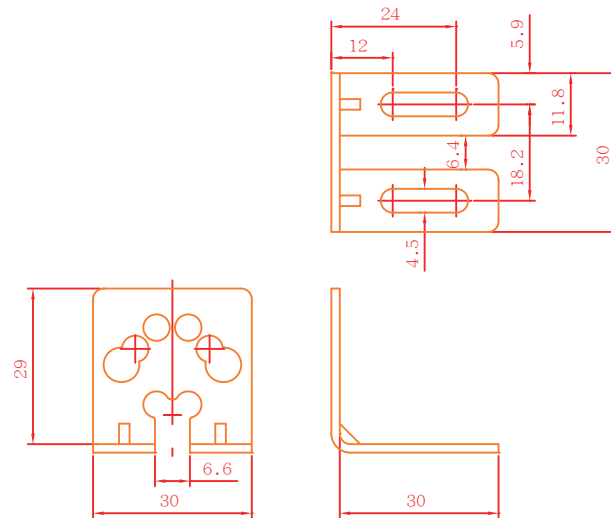
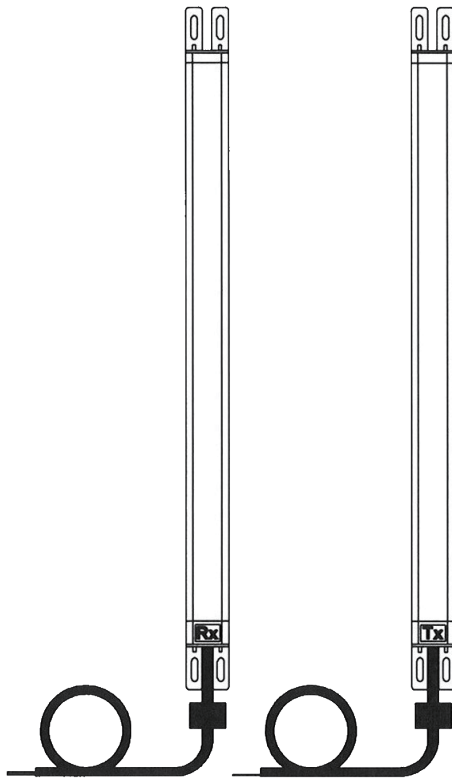
TYPE IV safety certification



Interconnect cable Transmitter and Receiver Mounting Kit

Connector cable

Mounting Bracket



Connecting cable for the direct outlet type:

Standard cable length: 3 m
Optional cable length: 5 m
Optional cable length: 10 m
TX: 4 core (signal line × 3 core, shielded × 1 core)
RX: 8 core (signal line × 7 core, shielded × 1 core)

Can be used with mirror group (050-450 ~ 050-1950 series) constitute around the perimeter of protection light curtains

Two or three sides of a machine can be safeguarded with a single light curtain by using mirrors to deflect the light curtain 's infrared beams.

