

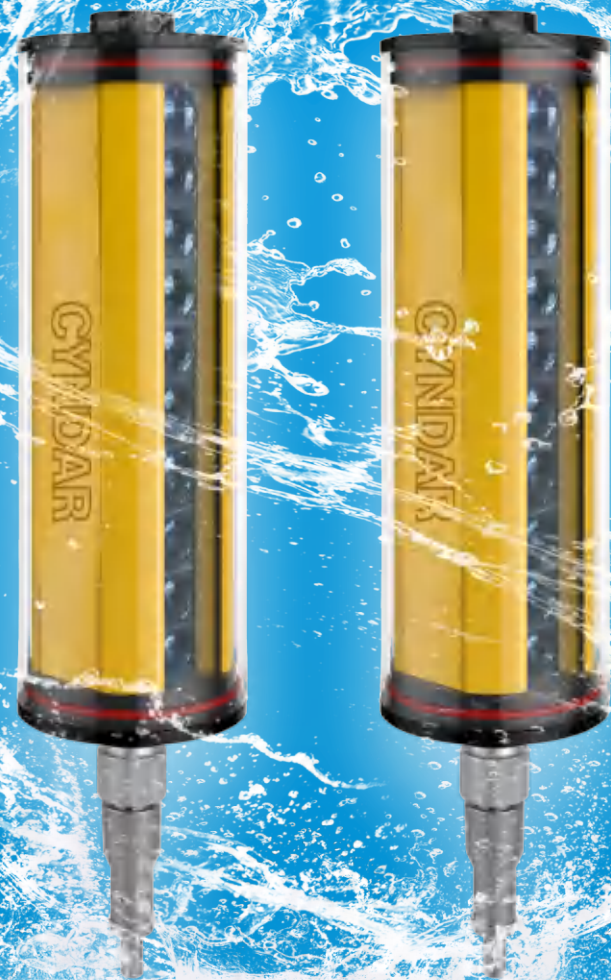
Safety light curtain/safety lidar/safety mat/safety edge/safety relay

超强防水安全光幕-CRFT Super waterproof safety light curtain

- 国际IP68级防水特殊定制
- 304不锈钢螺丝防水航空插头
- 超快响应速度（小于15ms）
- 能有效屏蔽99%干扰信号
- International IP68 waterproof special customization
- 304 stainless steel screw waterproof aviation plug
- Ultra-fast response speed (less than 15ms)
- Can effectively shield 99% of interference signals

广泛适用于压力机、液压机、油压机、剪板机、自动门等使用环境潮湿、室外的危险场合。

It is widely used in dangerous places such as presses, hydraulic presses, hydraulic presses, shears, automatic doors, etc., where the environment is humid and outdoor.



◆ CRFT安全光幕 Safety light curtain

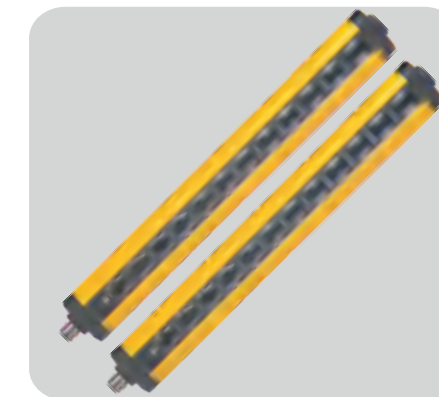
- ★ 自检功能完善：当安全传感器出现故障时，确保不向所控制的电器发送错误的信号；
- ★ 抗干扰能力强：系统对电磁信号，频闪灯光，焊接弧光及周围的光源具有良好的抗干扰能力；
- ★ 安装调试方便，配线简单，外形美观；
- ★ 采用表面贴装技术，防震性能优越；
- ★ 符合国际电工学会IEC61496-1/2标准安全等级，TUV的CE认证；
- ★ 响应时间短（≤15ms），安全可靠性能高；
- ★ 尺寸设计36mm*36mm，安全传感器可以通过航空插座与电缆线(M12)链接；
- ★ 所有电子元器件均采用全球知名品牌配件。
- ★ Perfect self-check function: When the safety screen protector fails, ensure that the wrong signal is not sent to the controlled electrical appliances.
- ★ Strong anti-interference ability: The system has good anti-interference ability to electromagnetic signal, stroboscopic light, welding arc and surrounding light source;
- ★ Easy installation and debugging, simple wiring, beautiful appearance;
- ★ Surface mounting technology is adopted, which has superior seismic performance.
- ★ It conforms to IEC61496-1/2 standard safety grade and TUV CE certification.
- ★ The corresponding time is short (≤15ms), and the safety and reliability performance is high.
- ★ The dimension design is 36mm*36mm. The safety sensor can be connected to the cable (M12) through the air socket.
- ★ All electronic components adopt world-renowned brand accessories.

◆ 产品配置 Product configuration

控制器、发光器、受光器、传输线和电源线组成。
The controller, the light emitter, the light receiver, the transmission line and the power line are composed.



CRT数据线
CRT data cable

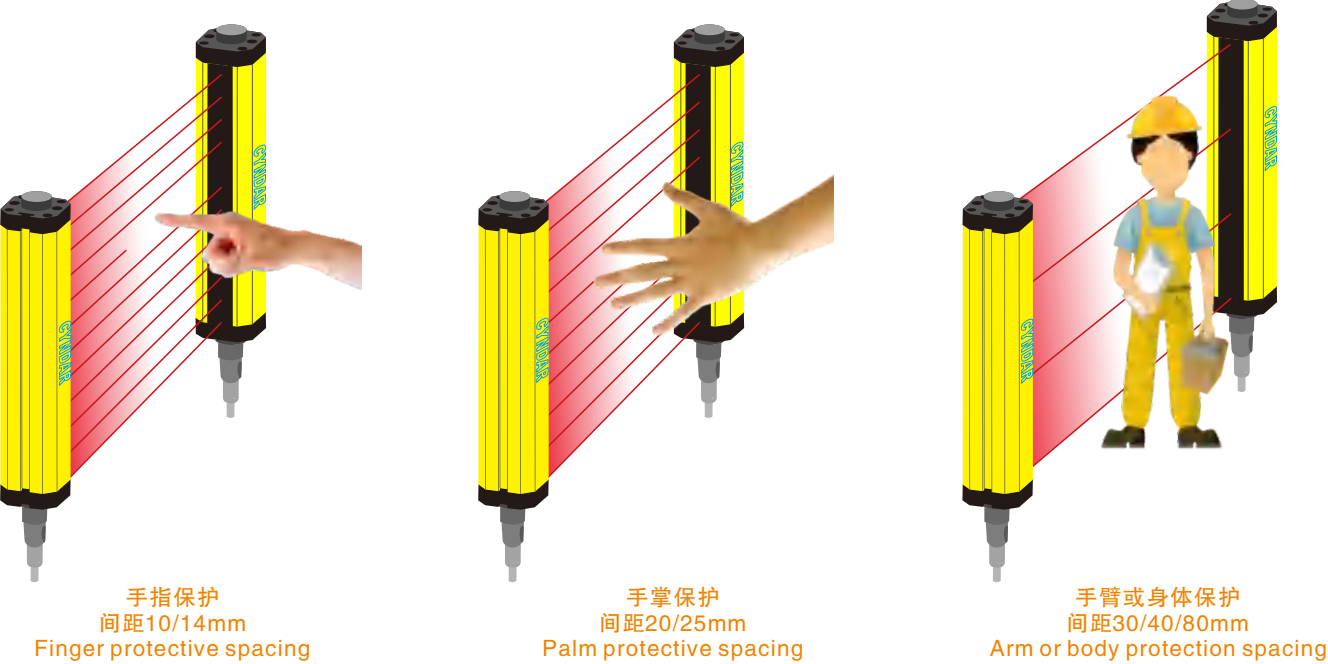


产品外形图
Product outline drawing



304不锈钢螺丝
密封部分全部采用密封圈
IP68级防水安全光幕
304 stainless steel screw,
sealing part all adopt sealing ring,
IP68 class waterproof safety light curtain

◆ 分辨率 Resolving power

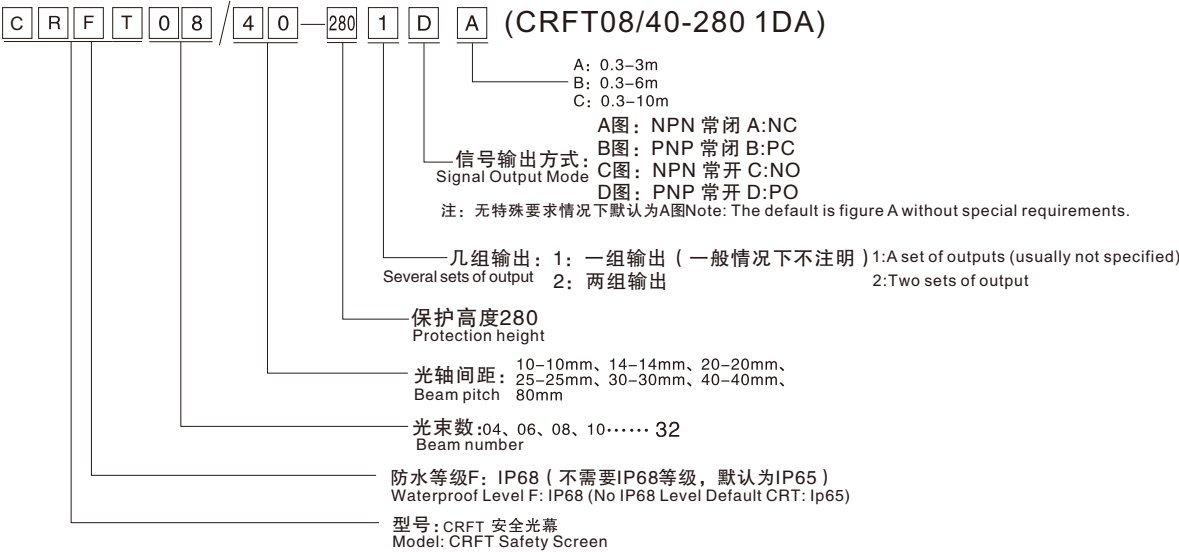


◆ 产品技术参数 Technical parameters of products

光幕形式 Light curtain form	对射式Counter shooting					
光轴间距 Beam pitch	10mm	14mm	20mm	25mm	30mm	40mm
检测精度 Check the accuracy	18mm	22mm	28mm	33mm	38mm	48mm
光束数 Beam number	6、8…32	6、8…32	4、6…32	6、8…32	4、6…32	4、6…32
保护高度 Height of protection	光轴间距Beam pitch X (光束数Beam number-1)					
检测距离 Detection distance	30 ~ 3000mm 、 30~6000mm					
响应时间 Response time	≤15ms					
抗光干扰 Anti light interference	10000Lux(入射角Incidence angle ≥5°)					
外形尺寸 Outline size	36x36xLmm(L为发光器/受光器长度L is the length of light emitter/receiver)					
防护等级 Protection level	IP65					
控制器 Controller	QCA QCA2					
电源电压 Supply voltage	DC12/24V AC110~220V(继电器输出Relay output)					
消耗电流 Consumption current	≤200mA					
输出 Output	NPN/PNP型，灌入电流500mA，电压1.5v以下，极性、短路、过载保护 NPN/PNP type, with current 500 mA and voltage less than 1.5 v, polarity, short circuit and overload protection					
输出状态 Output state	ON (接收指示灯Receiving Indicator Green Light)					
指示灯 Indicator light	投光器：电源指示灯（红色）；受光器：输出指示灯 透光（绿色）遮光（红色） Projector: Power indicator (red); Receiver: Output indicator (green) shading (red)					
光源 Light source	调制红外LED Modulated Infrared LED					
连接方式 Connection mode	圆形航空插座，配专用连接电缆，投光器4芯，受光器5芯 Circular aviation socket with special connecting cable, 4 cores of projector and 5 cores of receiver					
壳体材料 Shell material	铝合金，端盖：ABS增强尼龙 Aluminum alloy, end cover: ABS reinforced nylon					
耐环境光 Environmental light resistance	白炽光：受光面照度3000Lx；太阳光：受光面照度10000Lx Incandescent light: illumination of the receiving surface 3000Lx; sunlight: illumination of the receiving surface 10000Lx					
环境温度 Ambient temperature	工作时：-10~+40℃(但不结冰),保存时:-25~+55℃ When working: - 10 ~ + 40 C (but not freezing), when preserved: - 25 ~ + 55 C					
环境湿度 Ambient humidity	工作时：35~85%RH,保存时:35~95%RH Work: 35~85% RH, save: 35~95% RH					

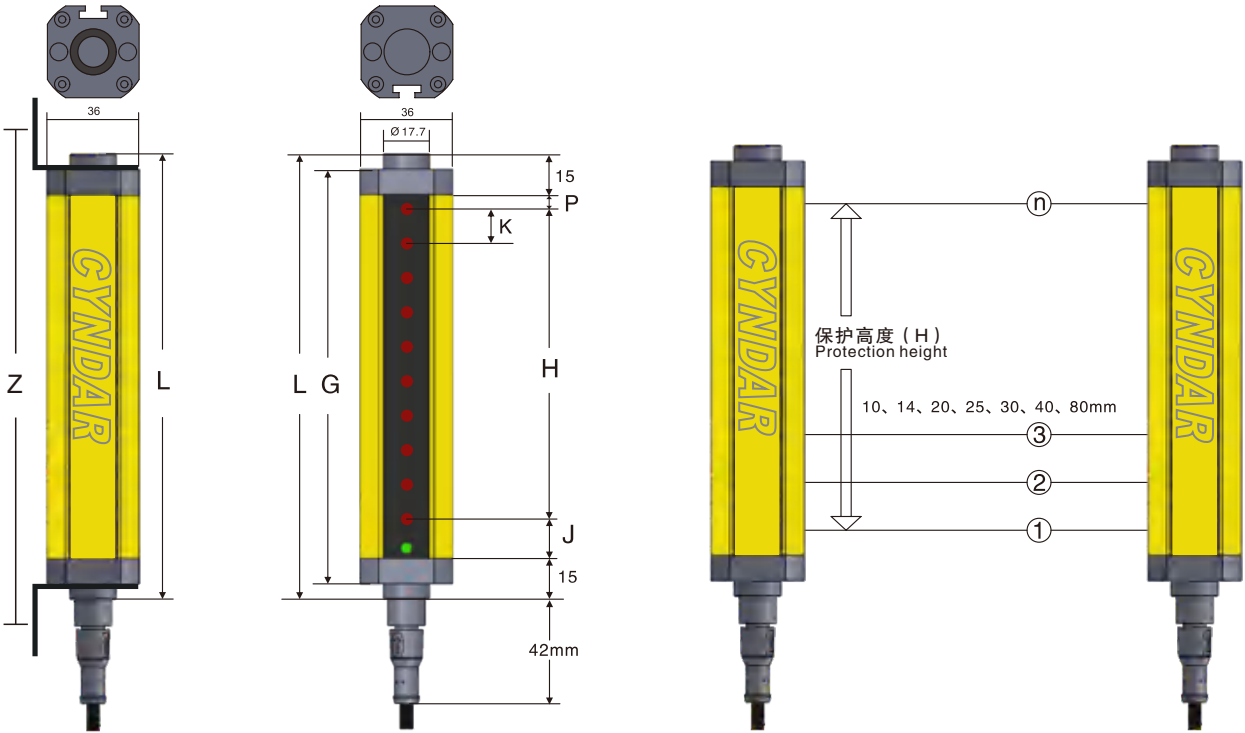
◆ CRFT型安全光幕规格表说明如下：
The specifications of CRT type safety screen are as follows

单位Unit: mm



详细型号请见下一页规格表 Detailed models can be found in the specification sheet on the previous page.

◆ 外形尺寸 Dimensions



备注：
Remarks

Z:上下直角架固定方式中心距离
Center Distance of Fixed Mode of Upper and Lower Right Angle Frames

Z=L+34mm
L=P+H+J+15mm+15mm

H= (n-1) *K=保护高度
Height of detection

K:光轴间距
Optical axis spacing

L:光幕总长度
Total length of light screen

n:光轴数
Optical axis number

K (mm)	10	14	20	25	30	40	80
P (mm)	5	7	10	12. 5	15	20	40
J (mm)	32	32	25	25	25	25	25

◆ CRFT规格一览表 Specification List

光轴间距 Beam pitch	光束数 Light beam	保护高度mm(H) Protection height	光幕高度mm(l) Screen height	产品型号 Product model	信号输出方式 Signal output mode				检测距离 Detection distance
					NPN	PNP	NPN	PNP	
10mm (K)	6	50	117	CRFT06/10-50	A	B	C	D	0.3-3m
	8	70	137	CRFT08/10-70	A	B	C	D	0.3-3m
	10	90	157	CRFT10/10-90	A	B	C	D	0.3-3m
	12	110	177	CRFT12/10-110	A	B	C	D	0.3-3m
	14	130	197	CRFT14/10-130	A	B	C	D	0.3-3m
	16	150	217	CRFT16/10-150	A	B	C	D	0.3-3m
	18	170	237	CRFT18/10-170	A	B	C	D	0.3-3m
	20	190	257	CRFT20/10-190	A	B	C	D	0.3-3m
	22	210	277	CRFT22/10-210	A	B	C	D	0.3-3m
	24	230	297	CRFT24/10-230	A	B	C	D	0.3-3m
	26	250	317	CRFT26/10-250	A	B	C	D	0.3-3m
	28	270	337	CRFT28/10-270	A	B	C	D	0.3-3m
	30	290	357	CRFT30/10-290	A	B	C	D	0.3-3m
	32	310	377	CRFT32/10-310	A	B	C	D	0.3-3m
	32	310	377	CRFT32/10-310	A	B	C	D	0.3-3m
14mm (K)	6	70	139	CRFT06/14-70	A	B	C	D	0.3-3m
	8	98	167	CRFT08/14-98	A	B	C	D	0.3-3m
	10	126	195	CRFT10/14-126	A	B	C	D	0.3-3m
	12	154	223	CRFT12/14-154	A	B	C	D	0.3-3m
	14	182	251	CRFT14/14-182	A	B	C	D	0.3-3m
	16	210	279	CRFT16/14-210	A	B	C	D	0.3-3m
	18	238	307	CRFT18/14-238	A	B	C	D	0.3-3m
	20	266	335	CRFT20/14-266	A	B	C	D	0.3-3m
	22	294	363	CRFT22/14-294	A	B	C	D	0.3-3m
	24	322	391	CRFT24/14-322	A	B	C	D	0.3-3m
	26	350	419	CRFT26/14-350	A	B	C	D	0.3-3m
	28	378	447	CRFT28/14-378	A	B	C	D	0.3-3m
	30	406	475	CRFT30/14-406	A	B	C	D	0.3-3m
	32	434	503	CRFT32/14-434	A	B	C	D	0.3-3m
	32	434	503	CRFT32/14-434	A	B	C	D	0.3-3m
20mm (K)	4	60	125	CRFT04/20-60	A	B	C	D	0.3-3m
	6	100	165	CRFT06/20-100	A	B	C	D	0.3-3m
	8	140	205	CRFT08/20-140	A	B	C	D	0.3-3m
	10	180	245	CRFT10/20-180	A	B	C	D	0.3-3m
	12	220	285	CRFT12/20-220	A	B	C	D	0.3-3m
	14	260	325	CRFT14/20-260	A	B	C	D	0.3-3m
	16	300	365	CRFT16/20-300	A	B	C	D	0.3-3m
	18	340	405	CRFT18/20-340	A	B	C	D	0.3-3m
	20	380	445	CRFT20/20-380	A	B	C	D	0.3-3m
	22	420	485	CRFT22/20-420	A	B	C	D	0.3-3m
	24	460	525	CRFT24/20-460	A	B	C	D	0.3-3m
	26	500	565	CRFT26/20-500	A	B	C	D	0.3-3m
	28	540	605	CRFT28/20-540	A	B	C	D	0.3-3m
	30	580	645	CRFT30/20-580	A	B	C	D	0.3-3m
	32	620	685	CRFT32/20-620	A	B	C	D	0.3-3m
25mm (K)	6	125	192.5	CRFT06/25-125	A	B	C	D	0.3-3m
	8	175	242.5	CRFT08/25-175	A	B	C	D	0.3-3m
	10	225	292.5	CRFT10/25-225	A	B	C	D	0.3-3m
	12	275	342.5	CRFT12/25-275	A	B	C	D	0.3-3m
	14	325	392.5	CRFT14/25-325	A	B	C	D	0.3-3m
	16	375	442.5	CRFT16/25-375	A	B	C	D	0.3-3m
	18	425	492.5	CRFT18/25-425	A	B	C	D	0.3-3m
	20	475	542.5	CRFT20/25-475	A	B	C	D	0.3-3m
	22	525	592.5	CRFT22/25-525	A	B	C	D	0.3-3m
	24	575	642.5	CRFT24/25-575	A	B	C	D	0.3-3m
	26	625	692.5	CRFT26/25-625	A	B	C	D	0.3-3m
	28	675	742.5	CRFT28/25-675	A	B	C	D	0.3-3m
	30	725	792.5	CRFT30/25-725	A	B	C	D	0.3-3m
	32	775	842.5	CRFT32/25-775	A	B	C	D	0.3-3m
	32	775	842.5	CRFT32/25-775	A	B	C	D	0.3-3m
30mm (K)	4	90	160	CRFT04/30-90	A	B	C	D	0.3-3m
	6	150	220	CRFT06/30-150	A	B	C	D	0.3-3m
	8	210	280	CRFT08/30-210	A	B	C	D	0.3-3m
	10	270	340	CRFT10/30-270	A	B	C	D	0.3-3m
	12	330	400	CRFT12/30-330	A	B	C	D	0.3-3m
	14	390	460	CRFT14/30-390	A	B	C	D	0.3-3m
	16	450	520	CRFT16/30-450	A	B	C	D	0.3-3m
	18	510	580	CRFT18/30-510	A	B	C	D	0.3-3m
	20	570	640	CRFT20/30-570	A	B	C	D	0.3-3m
	22	630	700	CRFT22/30-630	A	B	C	D	0.3-3m
	24	690	760	CRFT24/30-690	A	B	C	D	0.3-3m
	26	750	820	CRFT26/30-750	A	B	C	D	0.3-3m
	28	810	880	CRFT28/30-810	A	B	C	D	0.3-3m
	30	870	940	CRFT30/30-870	A	B	C	D	0.3-3m
	32	930	1000	CRFT32/30-930	A	B	C	D	0.3-3m
40mm (K)	4	120	195	CRFT04/40-120	A	B	C	D	0.3-3m
	6	200	275	CRFT06/40-200	A	B	C	D	0.3-3m
	8	280	355	CRFT08/40-280	A	B	C	D	0.3-3m
	10	360	435	CRFT10/40-360	A	B	C	D	0.3-3m
	12	440	515	CRFT12/40-440	A	B	C	D	0.3-3m
	14	520	595	CRFT14/40-520	A	B	C	D	0.3-3m
	16	600	675	CRFT16/40-600	A	B	C	D	0.3-3m
	18	680	755	CRFT18/40-680	A	B	C	D	0.3-3m
	20	760	835	CRFT20/40-760	A	B	C	D	0.3-3m
	22	840	915	CRFT22/40-840	A	B	C	D	0.3-3m
	24	920	995	CRFT24/40-920	A	B	C	D	0.3-3m
	26	1000	1075	CRFT26/40-1000	A	B	C	D	0.3-3m
	28	1080	1155	CRFT28/40-1080	A	B	C	D	0.3-3m
	30	1160	1235	CRFT30/40-1160	A	B	C	D	0.3-3m
	32	1240	1315	CRFT32/40-1240	A	B	C	D	0.3-3m
80mm (K)	4	240	335	CRFT04/80-240	A	B	C	D	0.3-3m
	6	400	495	CRFT06/80-400	A	B	C	D	0.3-3m
	8	560	655	CRFT08/80-560	A	B	C	D	0.3-3m
	10	720	815	CRFT10/80-720	A	B	C	D	0.3-3m
	12	880	975	CRFT12/80-880	A	B	C	D	0.3-3m
	14	1040	1135	CRFT14/80-1040	A	B	C	D	0.3-3m
	...	...	...	...	A	B	C	D	0.3-3m
	26	2000	2095	CRFT26/80-2000	A	B	C	D	0.3-3m
	28	2160	2255	CRFT28/80-2160	A	B	C	D	0.3-3m
	30	2320	2415	CRFT30/80-2320	A	B	C	D	0.3-3m
	32	2480	2575	CRFT32/80-2480	A	B	C	D	0.3-3m
	32	2480	2575	CRFT32/80-2480	A	B	C	D	0.3-3m

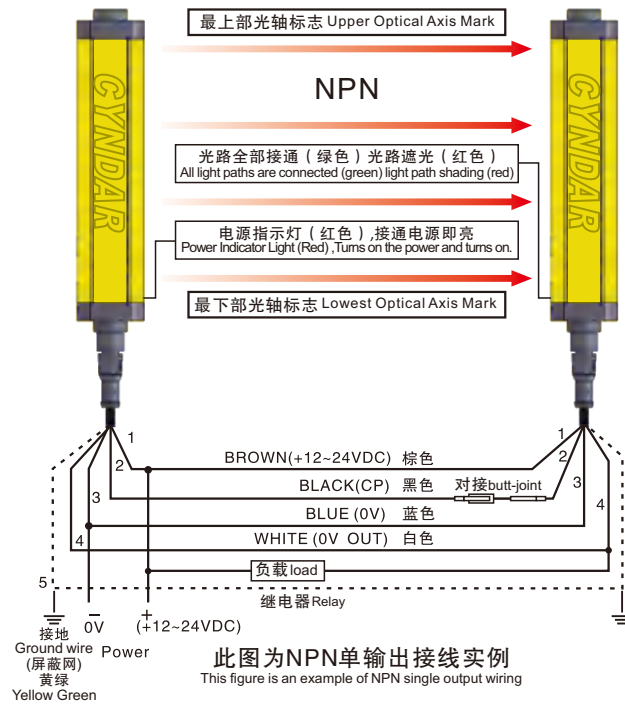
备注：输出方式详见上一页规格说明，如无要求默认按A图。80mm间距及特殊规格可另外订做，检测距离达3米以上需提前说明。

Note: The output mode is detailed in the specifications on the previous page. If there is no requirement, the default is figure A.

The 80mm spacing and special specifications can be customized separately, and the detection distance up to 3M or more needs to be specified in advance.

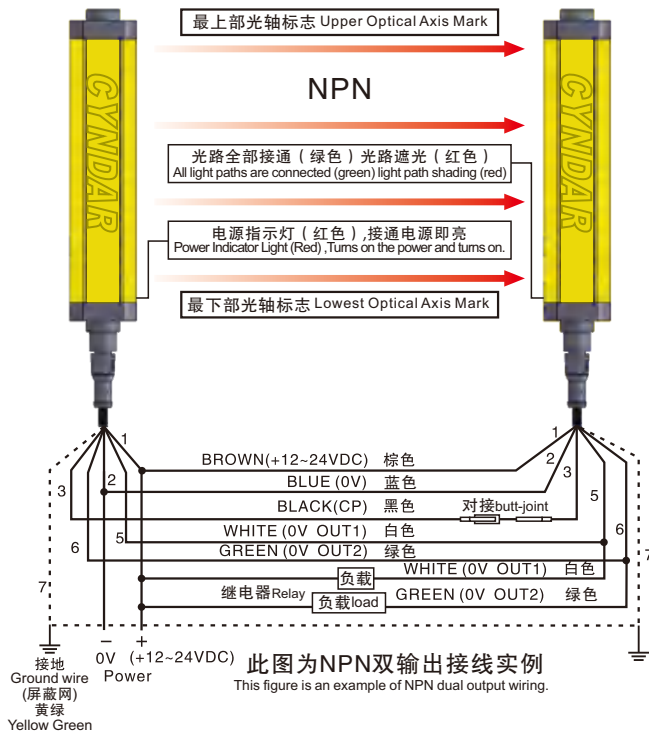
◆ CRFT五芯系列接线图

CRFT Five-core Series Wiring Diagram



◆ CRFT发射器、接收器七芯接线图

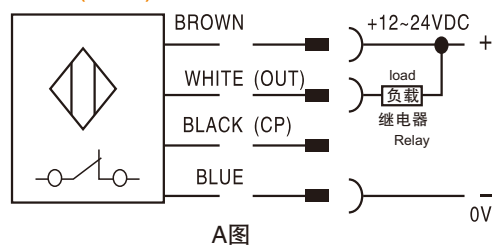
Transmitter and receiver seven-core wiring diagram



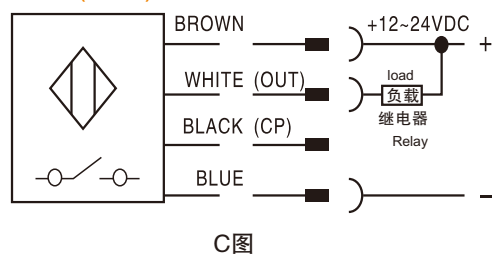
◆ CRFT信号输出选择(晶体管正常工作的实际输出)

CRFT signal output selection (actual output of transistor working normally)

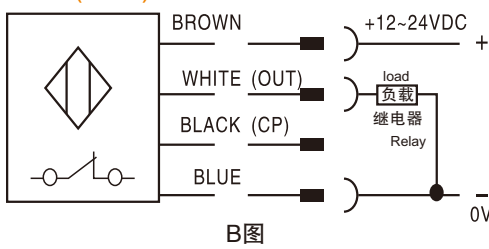
NPN(常闭)NC



NPN(常开)NO



PNP(常闭)PC



PNP(常开)PO

