

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



超薄安全光幕-CZT-CBT No blind spot safety light curtain

- QB系列超薄出光截面仅15mm
- QB series ultra-thin light output section is only 15mm
- QZ系列超薄侧面仅17.2mm
- QZ series ultra-thin side is only 17.2mm
- 超快响应速度（小于15ms）
- Ultra-fast response speed (less than 15ms)
- 能有效屏蔽99%干扰信号
- Can effectively shield 99% of interference signals

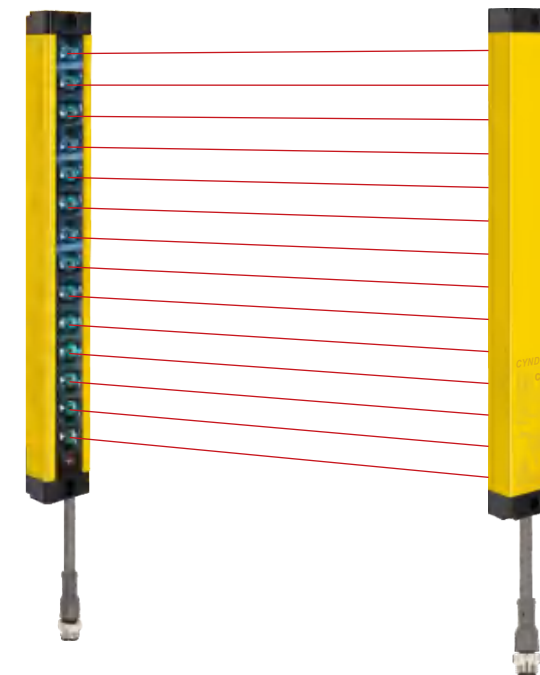
广泛适用于液压机、油压机、剪板机、注塑机等设备及安装空间特殊的危险场合的安全防护。

It is widely used in large machinery such as presses, hydraulic presses, hydraulic presses, shears, automatic doors, or dangerous occasions that require long-distance protection.

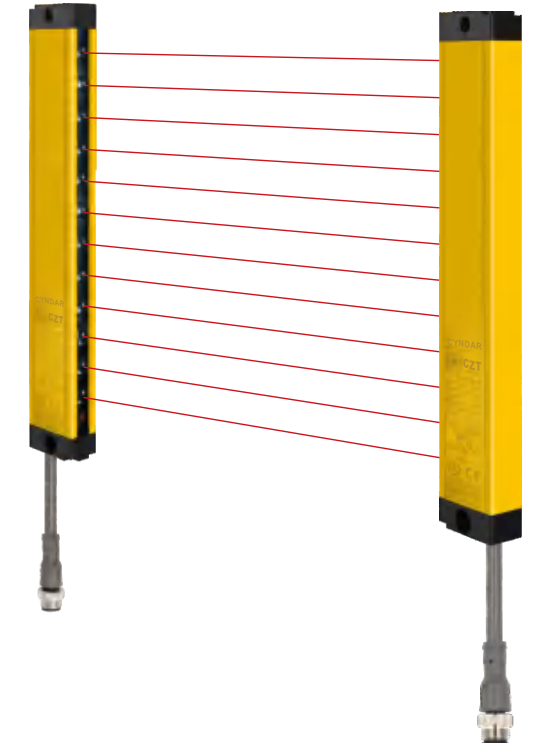


CYNDAR

◆ CZT超薄型安全光幕（17.2x30mm） Ultra-thin safety screen



◆ CBT超薄型安全光幕（30x15mm） Ultra-thin safety screen



◆ 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.

◆ 产品特点 Product characteristics

- ★ 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；
- ★ 超薄型外形尺寸设计，宽度和厚度QZ仅有17.2mm*30mm，QB仅有30mm*15mm，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.
- ★ Ultra-thin shape size design, width and thickness QZ only 17.2 mm*30 mm, QB only 30 mm*15 mm. The safety sensor can be connected to the cable (M12) through an aviation socket.
- ★ All electronic components adopt world-renowned brand accessories.

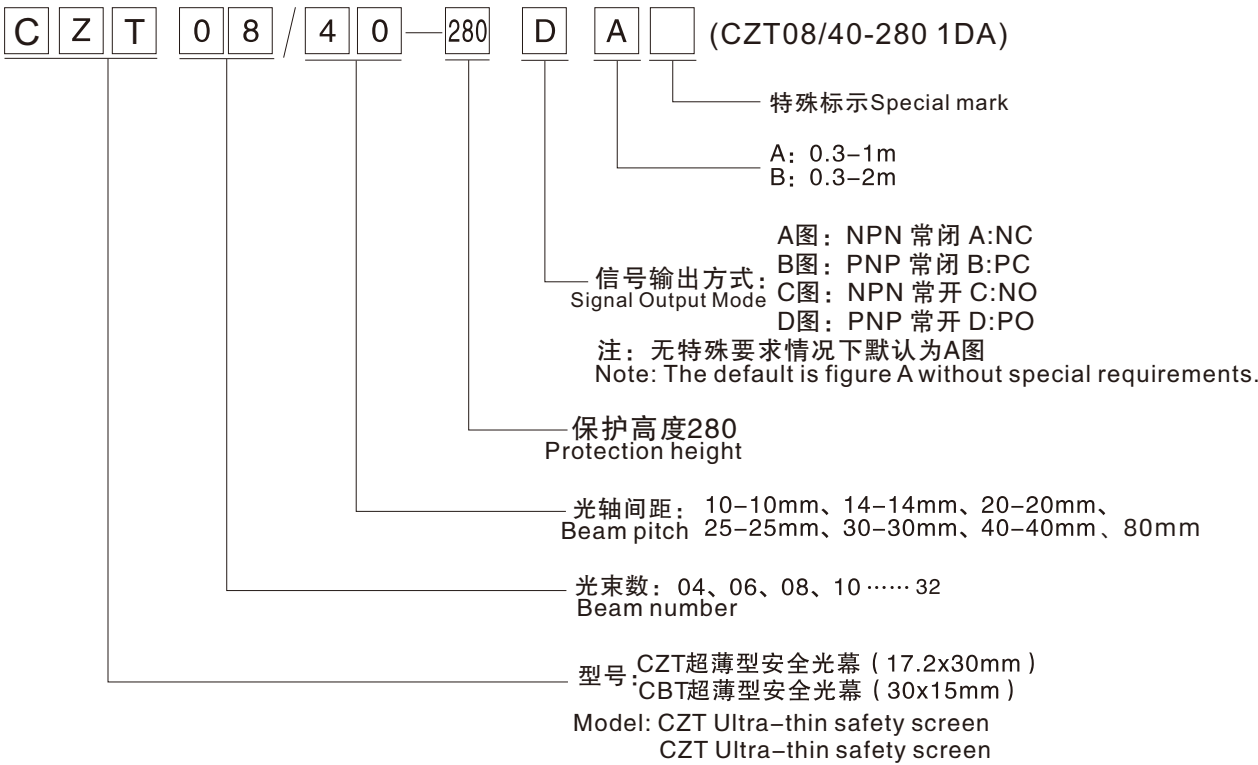
◆分辨率 Resolving power



◆CZT/CBT产品技术参数 Technical parameters of products

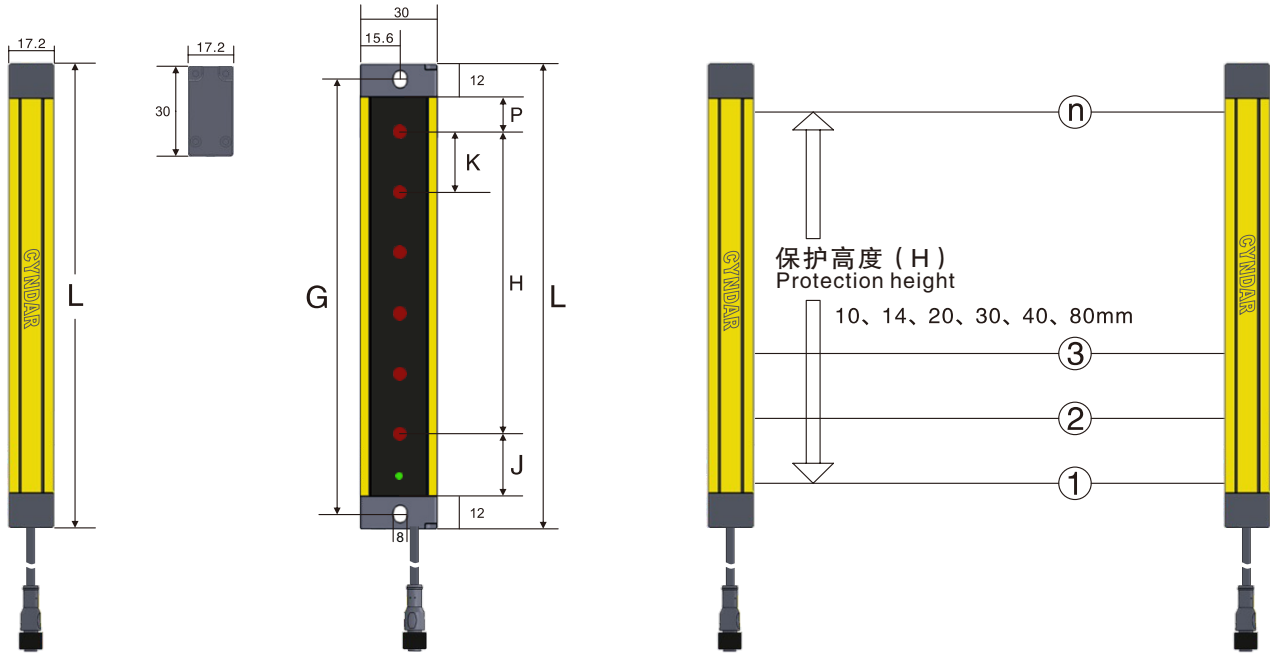
光幕形式 Light curtain form	对射式Counter shooting					
CZT光轴间距 Beam pitch	10mm	14mm	20mm	25mm	30mm	40mm
CBT光轴间距 Beam pitch	10mm		20mm			40mm
检测精度 Check the accuracy	18mm	22mm	28mm	33mm	38mm	48mm
光束数 Beam number	6、8…32	6、8…32	4、6…32	6、8…32	4、6…32	4、6…32
保护高度 Height of protection	光轴间距Beam pitch X (光束数Beam number-1)					
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	17.2x30xLmm 30x15xLmm(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 (接收指示绿灯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 通光 (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					

◆CZT/CBT超薄型安全光幕规格表说明如下:
CZT/CBT ultra-thin safety light curtain specification sheet is as follows



详细型号请见下一页规格表
Please see the specification table on the next page for detailed models.

◆CZT外形尺寸 Dimensions



备注:
Remarks
H= (n-1) *K=保护高度
Height of detection
L:光幕总长度
Total length of light screen
n:光轴数
Optical axis number
固定孔位中心距离
Fixed hole center distance
Z=L-11mm
K:光轴间距
Optical axis spacing

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

◆ CZT规格一览表Specification List

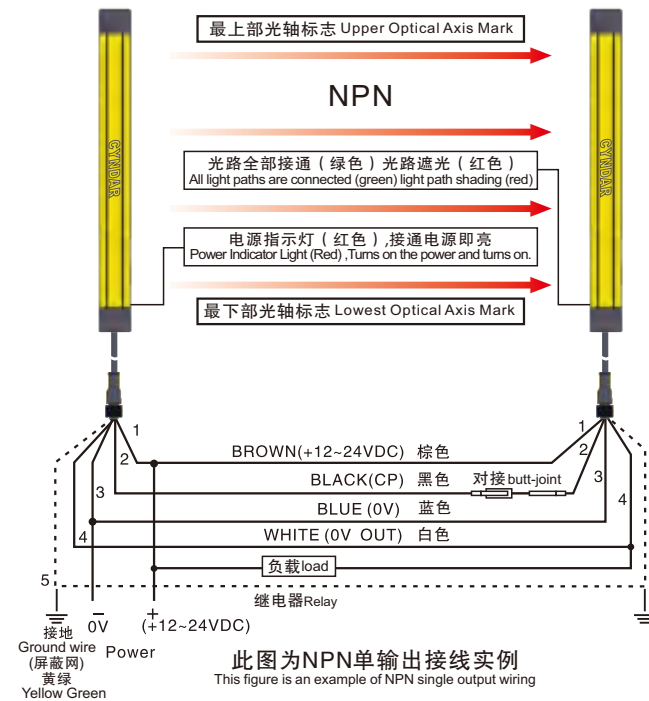
光轴间距 Beam pitch	光束数 Light beam	保护高度mm(H) Protection height	光幕高度mm(l) Screen height	产品型号 Product model	信号输出方式 Signal output mode				检测距离 Detection distance
					NPN	PNP	NPN	PNP	
10mm (K)	6	50	111	CZT06/10-50	A	B	C	D	0.3-3m
	8	70	131	CZT08/10-70	A	B	C	D	0.3-3m
	10	90	151	CZT10/10-90	A	B	C	D	0.3-3m
	12	110	171	CZT12/10-110	A	B	C	D	0.3-3m
	14	130	191	CZT14/10-130	A	B	C	D	0.3-3m
	16	150	211	CZT16/10-150	A	B	C	D	0.3-3m
	18	170	231	CZT18/10-170	A	B	C	D	0.3-3m
	20	190	251	CZT20/10-190	A	B	C	D	0.3-3m
	22	210	271	CZT22/10-210	A	B	C	D	0.3-3m
	24	230	291	CZT24/10-230	A	B	C	D	0.3-3m
	26	250	311	CZT26/10-250	A	B	C	D	0.3-3m
	28	270	331	CZT28/10-270	A	B	C	D	0.3-3m
	30	290	351	CZT30/10-290	A	B	C	D	0.3-3m
	32	310	371	CZT32/10-310	A	B	C	D	0.3-3m
	6	70	133	CZT06/14-70	A	B	C	D	0.3-3m
14mm (K)	8	98	161	CZT08/14-98	A	B	C	D	0.3-3m
	10	126	189	CZT10/14-126	A	B	C	D	0.3-3m
	12	154	217	CZT12/14-154	A	B	C	D	0.3-3m
	14	182	245	CZT14/14-182	A	B	C	D	0.3-3m
	16	210	273	CZT16/14-210	A	B	C	D	0.3-3m
	18	238	301	CZT18/14-238	A	B	C	D	0.3-3m
	20	266	329	CZT20/14-266	A	B	C	D	0.3-3m
	22	294	357	CZT22/14-294	A	B	C	D	0.3-3m
	24	322	385	CZT24/14-322	A	B	C	D	0.3-3m
	26	350	413	CZT26/14-350	A	B	C	D	0.3-3m
	28	378	441	CZT28/14-378	A	B	C	D	0.3-3m
	30	406	469	CZT30/14-406	A	B	C	D	0.3-3m
	32	434	497	CZT32/14-434	A	B	C	D	0.3-3m
20mm (K)	4	60	119	CZT04/20-60	A	B	C	D	0.3-3m
	6	100	159	CZT06/20-100	A	B	C	D	0.3-3m
	8	140	199	CZT08/20-140	A	B	C	D	0.3-3m
	10	180	239	CZT10/20-180	A	B	C	D	0.3-3m
	12	220	279	CZT12/20-220	A	B	C	D	0.3-3m
	14	260	319	CZT14/20-260	A	B	C	D	0.3-3m
	16	300	359	CZT16/20-300	A	B	C	D	0.3-3m
	18	340	399	CZT18/20-340	A	B	C	D	0.3-3m
	20	380	439	CZT20/20-380	A	B	C	D	0.3-3m
	22	420	479	CZT22/20-420	A	B	C	D	0.3-3m
	24	460	519	CZT24/20-460	A	B	C	D	0.3-3m
	26	500	559	CZT26/20-500	A	B	C	D	0.3-3m
	28	540	599	CZT28/20-540	A	B	C	D	0.3-3m
	30	580	639	CZT30/20-580	A	B	C	D	0.3-3m
	32	620	679	CZT32/20-620	A	B	C	D	0.3-3m
25mm (K)	6	125	186.5	CZT06/25-125	A	B	C	D	0.3-3m
	8	175	236.5	CZT08/25-175	A	B	C	D	0.3-3m
	10	225	286.5	CZT10/25-225	A	B	C	D	0.3-3m
	12	275	336.5	CZT12/25-275	A	B	C	D	0.3-3m
	14	325	386.5	CZT14/25-325	A	B	C	D	0.3-3m
	16	375	436.5	CZT16/25-375	A	B	C	D	0.3-3m
	18	425	486.5	CZT18/25-425	A	B	C	D	0.3-3m
	20	475	538.5	CZT20/25-475	A	B	C	D	0.3-3m
	22	525	586.5	CZT22/25-525	A	B	C	D	0.3-3m
	24	575	636.5	CZT24/25-575	A	B	C	D	0.3-3m
	26	625	686.5	CZT26/25-625	A	B	C	D	0.3-3m
	28	675	736.5	CZT28/25-675	A	B	C	D	0.3-3m
	30	725	786.5	CZT30/25-725	A	B	C	D	0.3-3m
	32	775	836.5	CZT32/25-775	A	B	C	D	0.3-3m
30mm (K)	4	90	154	CZT04/30-90	A	B	C	D	0.3-3m
	6	150	214	CZT06/30-150	A	B	C	D	0.3-3m
	8	210	274	CZT08/30-210	A	B	C	D	0.3-3m
	10	270	334	CZT10/30-270	A	B	C	D	0.3-3m
	12	330	394	CZT12/30-330	A	B	C	D	0.3-3m
	14	390	454	CZT14/30-390	A	B	C	D	0.3-3m
	16	450	514	CZT16/30-450	A	B	C	D	0.3-3m
	18	510	574	CZT18/30-510	A	B	C	D	0.3-3m
	20	570	634	CZT20/30-570	A	B	C	D	0.3-3m
	22	630	694	CZT22/30-630	A	B	C	D	0.3-3m
	24	690	754	CZT24/30-690	A	B	C	D	0.3-3m
	26	750	814	CZT26/30-750	A	B	C	D	0.3-3m
	28	810	874	CZT28/30-810	A	B	C	D	0.3-3m
	30	870	934	CZT30/30-870	A	B	C	D	0.3-3m
	32	930	994	CZT32/30-930	A	B	C	D	0.3-3m
40mm (K)	4	120	189	CZT04/40-120	A	B	C	D	0.3-3m
	6	200	269	CZT06/40-200	A	B	C	D	0.3-3m
	8	280	349	CZT08/40-280	A	B	C	D	0.3-3m
	10	360	429	CZT10/40-360	A	B	C	D	0.3-3m
	12	440	509	CZT12/40-440	A	B	C	D	0.3-3m
	14	520	589	CZT14/40-520	A	B	C	D	0.3-3m
	16	600	669	CZT16/40-600	A	B	C	D	0.3-3m
	18	680	749	CZT18/40-680	A	B	C	D	0.3-3m
	20	760	829	CZT20/40-760	A	B	C	D	0.3-3m
	22	840	909	CZT22/40-840	A	B	C	D	0.3-3m
	24	920	989	CZT24/40-920	A	B	C	D	0.3-3m
	26	1000	1069	CZT26/40-1000	A	B	C	D	0.3-3m
	28	1080	1149	CZT28/40-1080	A	B	C	D	0.3-3m
	30	1160	1229	CZT30/40-1160	A	B	C	D	0.3-3m
	32	1240	1309	CZT32/40-1240	A	B	C	D	0.3-3m
80mm (K)	4	240	329	CZT04/80-240	A	B	C	D	0.3-3m
	6	400	489	CZT06/80-400	A	B	C	D	0.3-3m
	8	560	649	CZT08/80-560	A	B	C	D	0.3-3m
	10	720	809	CZT10/80-720	A	B	C	D	0.3-3m
	12	880	969	CZT12/80-880	A	B	C	D	0.3-3m
	14	1040	1129	CZT14/80-1040	A	B	C	D	0.3-3m
	...	...	...	...	A	B	C	D	0.3-3m
	26	2000	2089	CZT26/80-2000	A	B	C	D	0.3-3m
	28	2160	2249	CZT28/80-2160	A	B	C	D	0.3-3m
	30	2320	2409	CZT30/80-2320	A	B	C	D	0.3-3m
	32	2480	2569	CZT32/80-2480	A	B	C	D	0.3-3m

备注：输出方式详见上一规格说明，如无要求默认做A图。80mm间距及特殊规格可另外订做,检测距离0.3-2M。

Remarks: Please refer to the specification on the previous page for the output method. If there is no requirement, the default is A picture. 80mm pitch and special specifications can be customized, The detection distance is 0.3-2M.

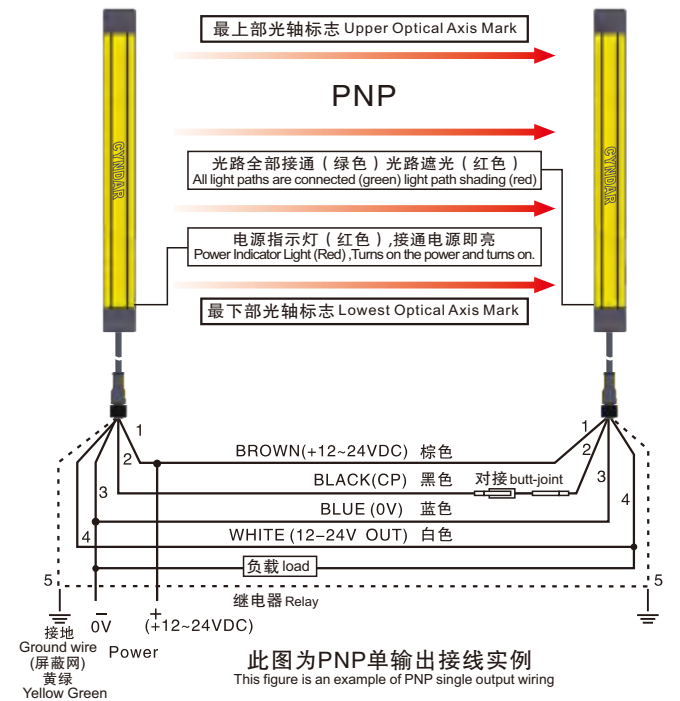
◆ CZT发射接收全五芯系列NPN接线图

CZT transmitting and receiving full five-core series NPN wiring diagram



◆ CZT发射器、接收器全五芯PNP接线图

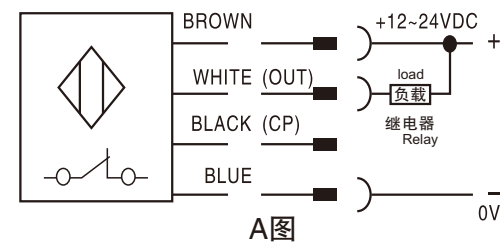
CZT transmitter, receiver full five-core PNP wiring diagram



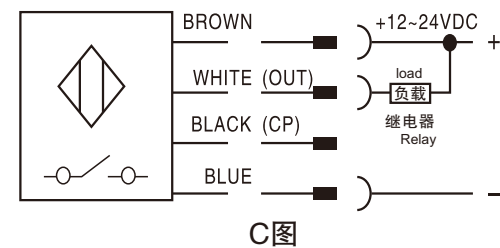
◆ CZT信号输出选择（晶体管正常工作的实际输出）

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

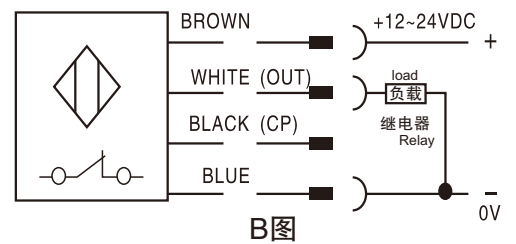
NPN 常闭 NC



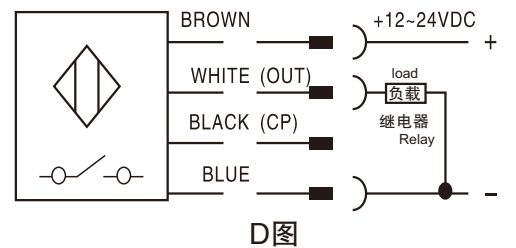
NPN 常开 NO



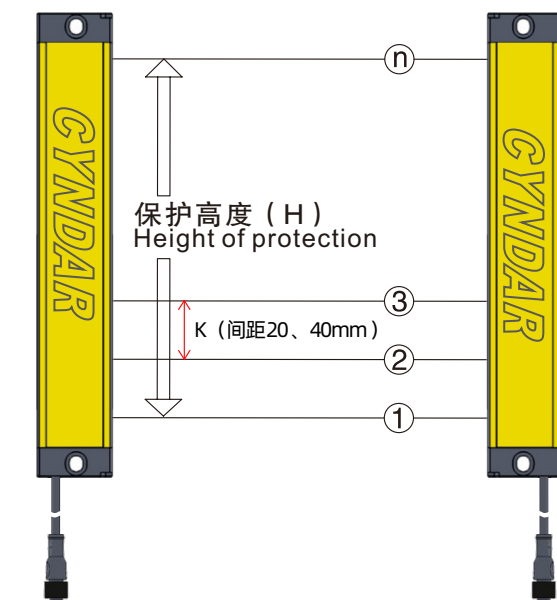
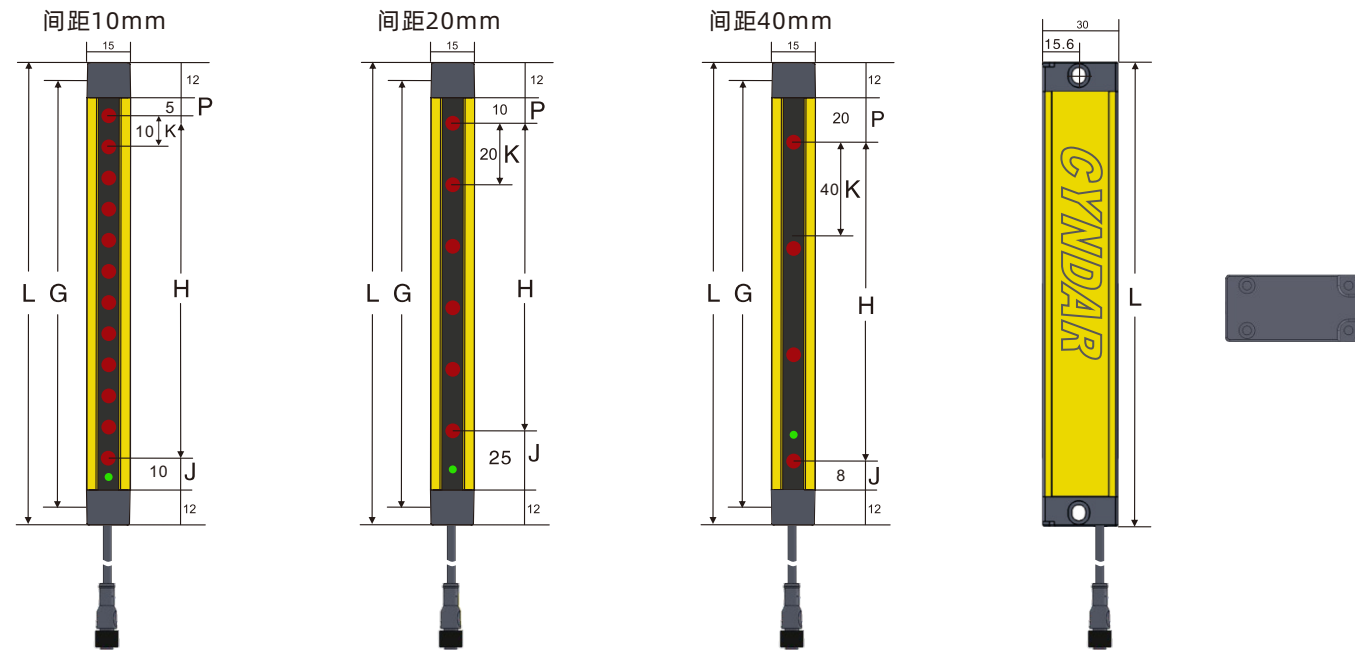
PNP 常闭 PC



PNP 常开 PO



◆ CBT外形尺寸 Dimensions



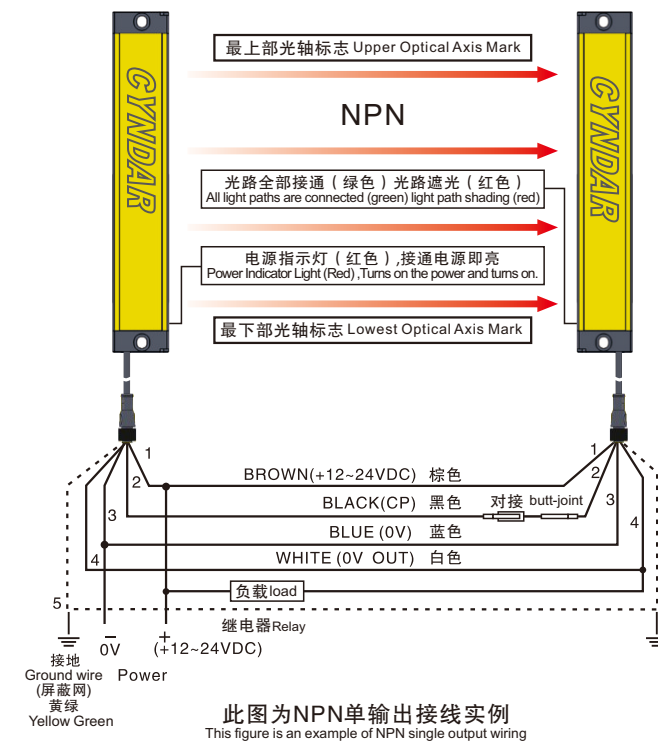
光轴间距20mm (K) Optical axis spacing 20mm (K)			
4	CBT04/20-60*#	60	119
6	CBT06/20-100*#	100	159
8	CBT08/20-140*#	140	199
10	CBT10/20-180*#	180	239
12	CBT12/20-220*#	220	279
14	CBT14/20-260*#	260	319
16	CBT16/20-300*#	300	359
18	CBT18/20-340*#	340	399
20	CBT20/20-380*#	380	439
22	CBT22/20-420*#	420	479
24	CBT24/20-460*#	460	519
26	CBT26/20-500*#	500	559
28	CBT28/20-540*#	540	599
30	CBT30/20-580*#	580	639
32	CBT32/20-620*#	620	679

◆ CBT规格一览表 Specification List

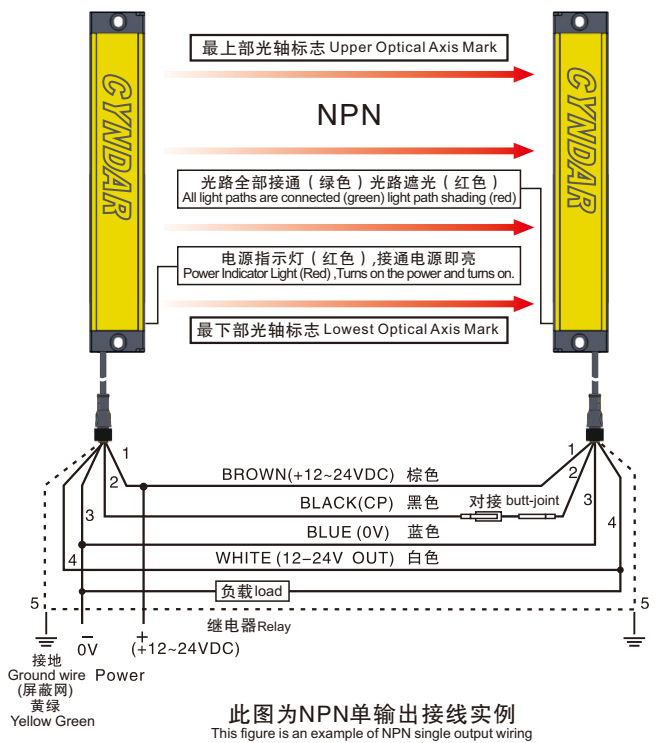
光束数 Optical axis number	规格型号 Model number	保护高度 Protection height	光幕高度 Light curtain height
光轴间距10mm (K) Optical axis spacing 10mm (K)			
6	CBT06/10-50*#	50	89
8	CBT08/10-70*#	70	109
10	CBT10/10-90*#	90	129
12	CBT12/10-110*#	110	149
14	CBT14/10-130*#	130	169
16	CBT16/10-150*#	150	189
18	CBT18/10-170*#	170	209
20	CBT20/10-190*#	190	229
22	CBT22/10-210*#	210	249
24	CBT24/10-230*#	230	269
26	CBT26/10-250*#	250	289
28	CBT28/10-270*#	270	309
30	CBT30/10-290*#	290	329
32	CBT32/10-310*#	310	349

光轴间距40mm (K) Optical axis spacing 40mm (K)			
4	CBT04/40-120*#	120	189
6	CBT06/40-200*#	200	269
8	CBT08/40-280*#	280	349
10	CBT10/40-360*#	360	429
12	CBT12/40-440*#	440	509
14	CBT14/40-520*#	520	589
16	CBT16/40-600*#	600	669
18	CBT18/40-680*#	680	749
20	CBT20/40-760*#	760	829
22	CBT22/40-840*#	840	909
24	CBT24/40-920*#	920	989
26	CBT26/40-1000*#	1000	1069
28	CBT28/40-1080*#	1080	1149
30	CBT30/40-1160*#	1160	1229
32	CBT32/40-1240*#	1240	1309

◆ CBT发射器、接收器五芯接线图 CBT transmitting and receiving five-core wiring diagram

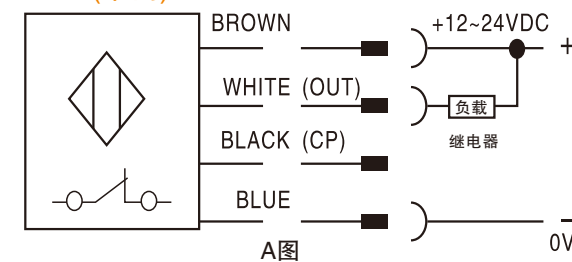


◆ CBT发射器、接收器五芯接线图 CBT transmitting and receiving five-core wiring diagram

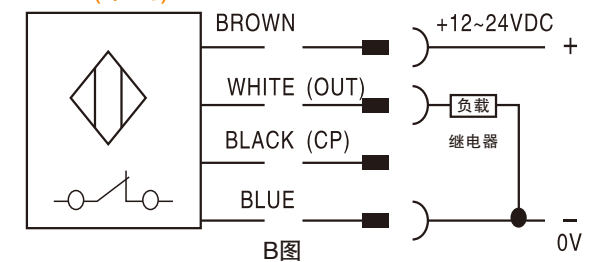


◆ CBT信号输出选择（晶体管正常工作的实际输出） CBT signal output selection (actual output of transistor working normally)

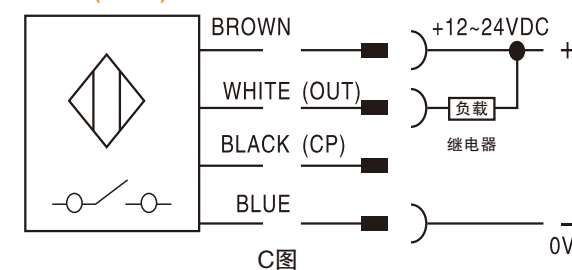
NPN(常闭)NC



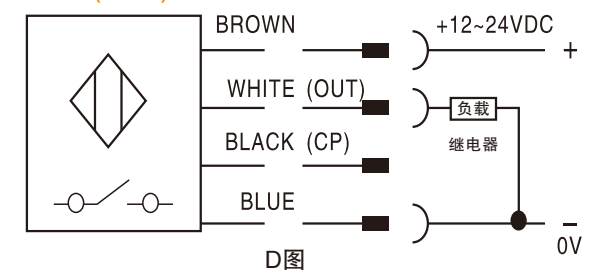
PNP(常闭)PC



NPN(常开)NO

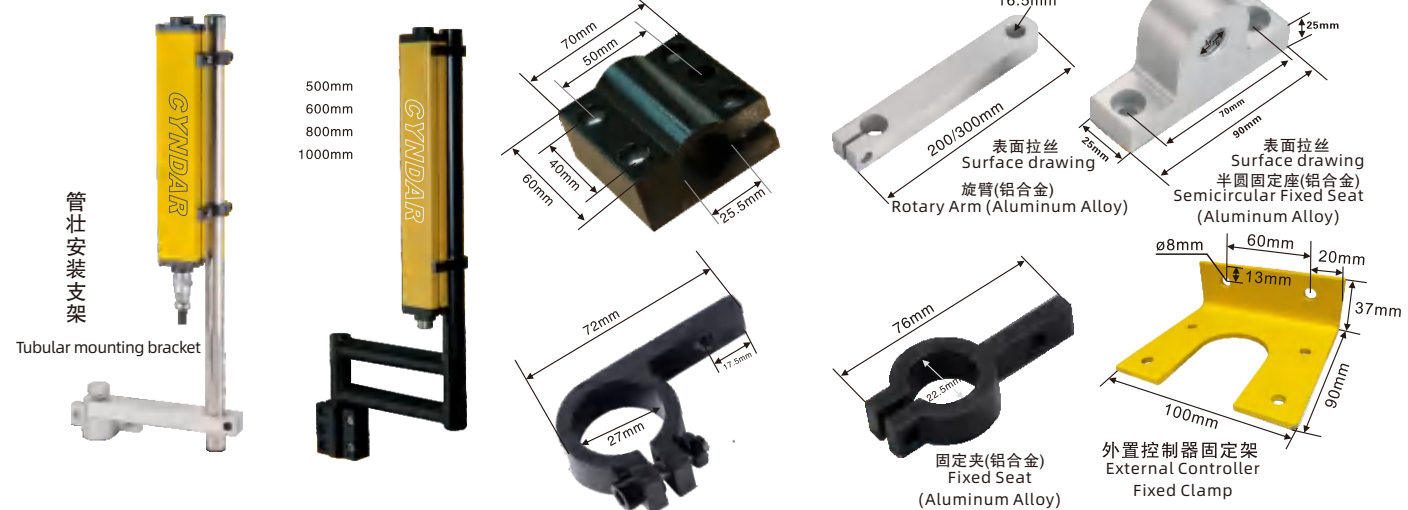
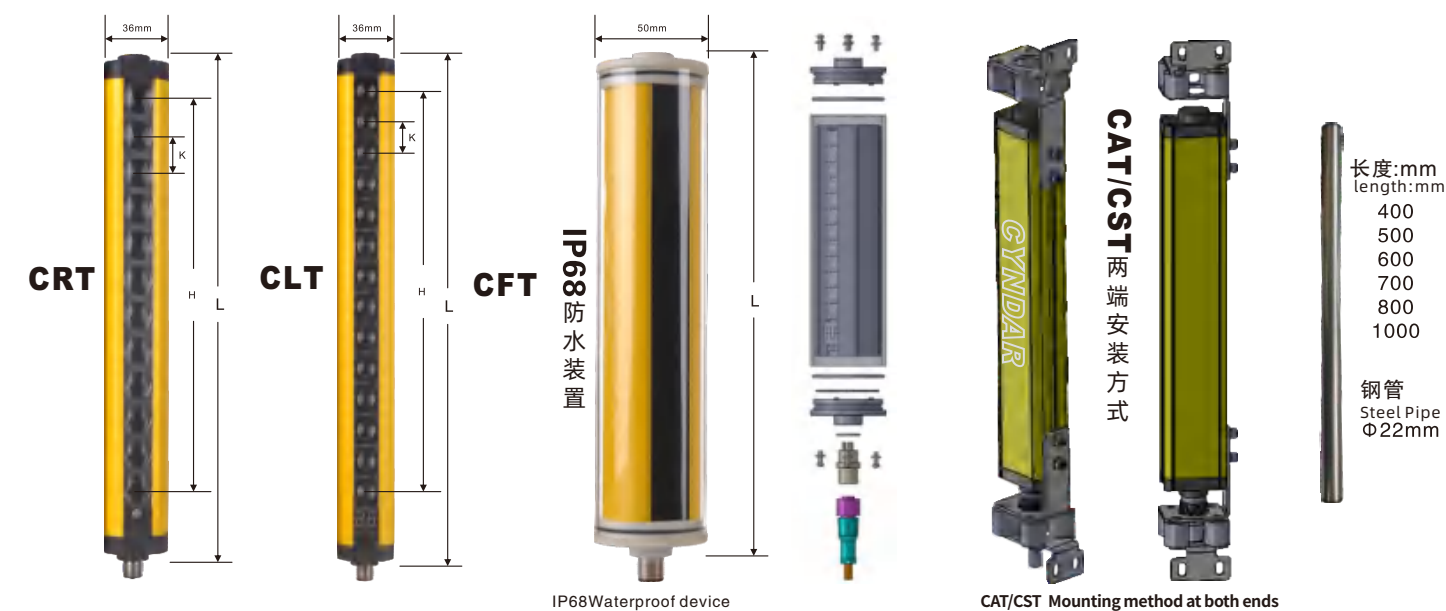


PNP(常开)PO



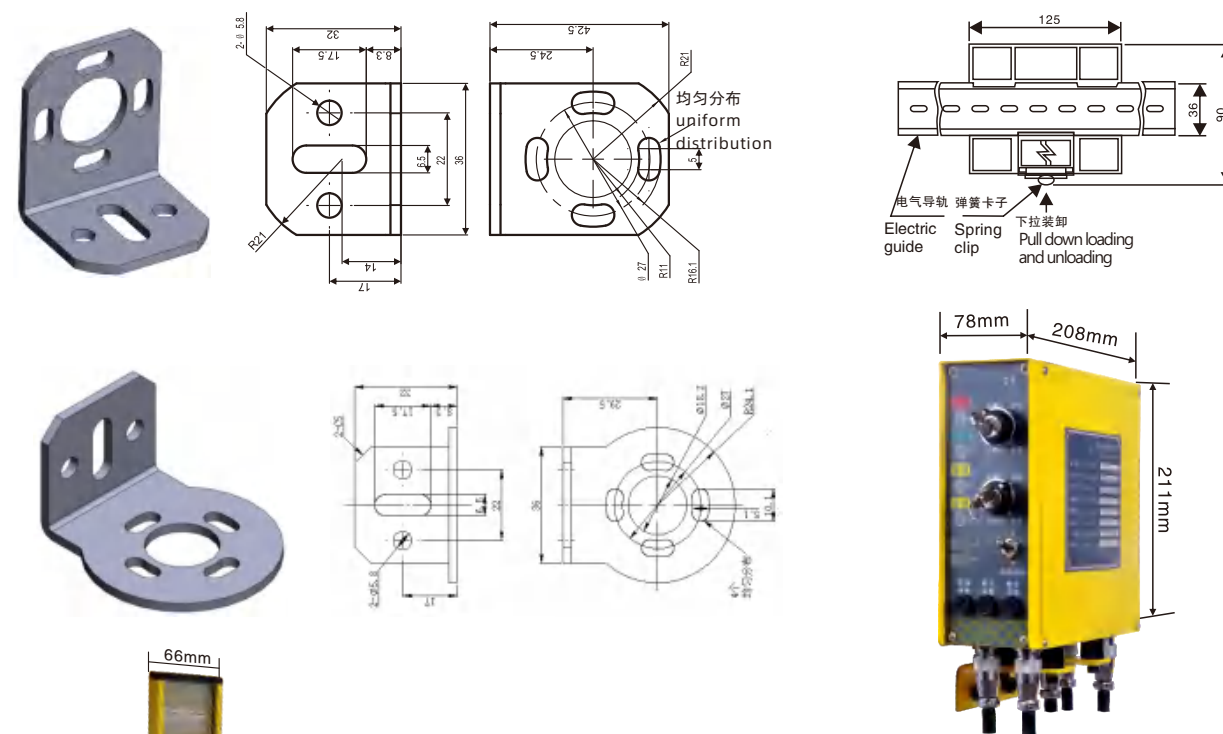
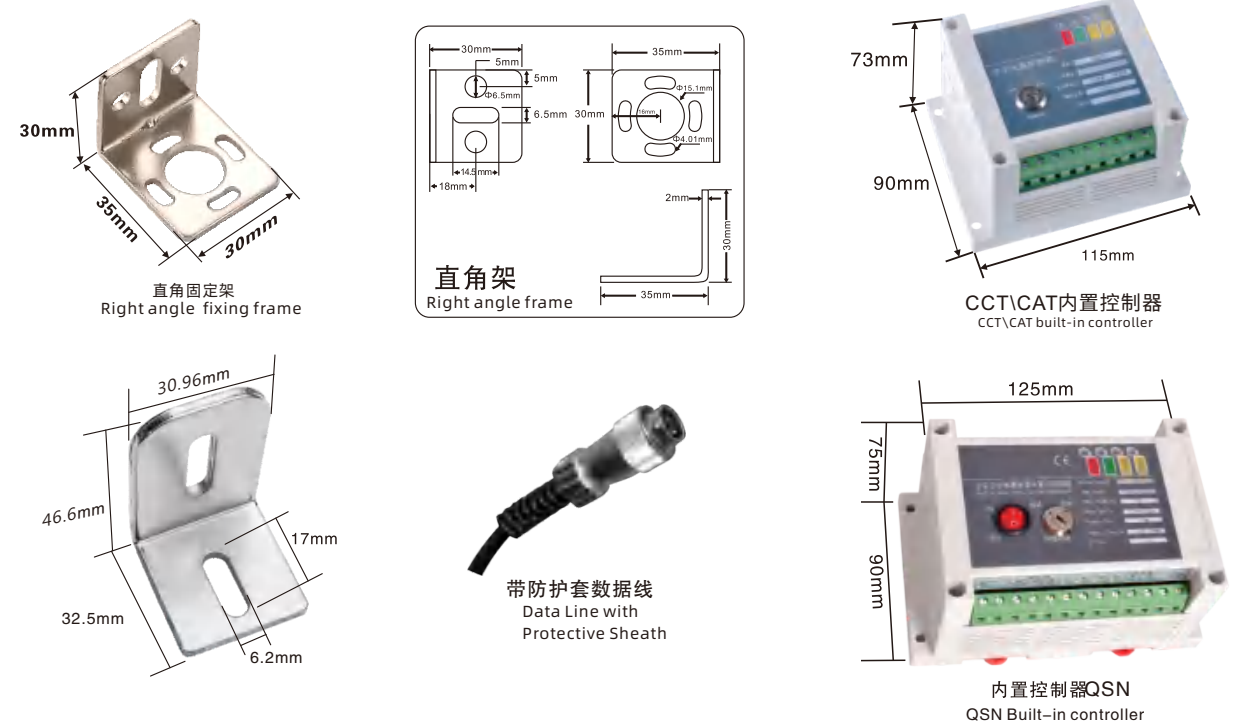
◆外观尺寸图

Appearance size chart



◆外观尺寸图

Appearance size chart



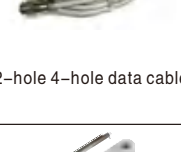
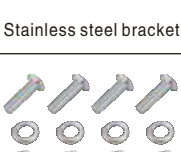
配件表 Accessory table

品名	形状 shape	型号 Model	描述 describe	备注 Remarks
内置式控制器		QCA	安装电控箱内与QC、QA安全光幕配套使用无源输出可直接接大功率负载 Installation of electronic control box with QC, QA safety light curtain and passive output can directly connect high-power load	选配件 Spare parts
内置式控制器		QET	安装电控箱内与QE、QT安全光幕配套使用无源输出可直接接大功率负载 Installation of electronic control box with QE, QT safety light curtain and passive output can directly connect high-power load	选配件 Spare parts
内置式控制器		QCA2	安装电控箱内与QC、QA安全光幕配套使用无源输出可直接接大功率负载 Installation of electronic control box with QC, QA safety light curtain and passive output can directly connect high-power load	选配件 Spare parts
内置式控制器		QSN	安装电控箱内与QS、QV安全光幕配套使用无源输出可直接接大功率负载 Installation of electronic control box with QS, QV safety light curtain and passive output can directly connect high-power load	选配件 Spare parts
内置式控制器		Tner-A31	安装电控箱内与QC、QA、QE、QT双输出安全光幕配套使用无源输出可直接接大功率负载，提供4组无源开关信号 Installation of electronic control box and QC, QA, QE, QT double output safety light curtain matching use of passive output can directly connect high-power load, provide four groups of passive switching signals	选配件 Spare parts
内置式控制器		LCS-SRA/B	安装电控箱内与QC、QA、QE、QT双输出安全光幕配套使用无源输出可直接接大功率负载，提供4组无源开关信号 Installation of electronic control box and QC, QA, QE, QT double output safety light curtain matching use of passive output can directly connect high-power load, provide four groups of passive switching signals	选配件 Spare parts
外置双面控制器		QSWs	安装机器侧面QSW双继电器无源输出 Install machine side QSW Dual relay passive output	选配件 Spare parts
外置单面控制器		QSWs	安装机器侧面QSW双继电器无源输出 Install machine side QSW Dual relay passive output	选配件 Spare parts
控制器固定架		QCA-06	用于QS外置控制器固定架 For QS external controller mounting bracket	标配件 Standard

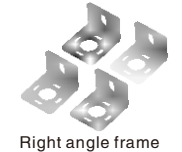
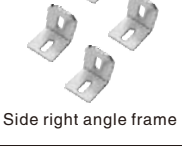
五针五芯电缆		QSN543 QA543	五针Φ16航空接头 带2.5x3.56m屏蔽电缆 发射、接收单元 Five-pin Φ16 aviation joint with 2.5x3.56m shielded cable transmitting and receiving unit	标配 Standard
		QSN545 QA545	五针Φ16航空接头 带5m屏蔽电缆 接收单元 Five-pin Φ16 aviation joint with 5m shielded cable	选配件 Spare parts
		QSN5410 QA5410	五针Φ16航空接头 带10m屏蔽电缆 接收单元 Five-pin Φ16 aviation joint with 10m shielded cable	选配件 Spare parts
五针五芯电缆		QSW543	五针Φ16航空接头 带3m屏蔽电缆 接收单元 Five-pin Φ16 aviation joint with 3m shielded cable	标配 Standard
		QSW545	五针Φ16航空接头 带5m屏蔽电缆 接收单元 Five-pin Φ16 aviation joint with 5m shielded cable	选配件 Spare parts
		QSW5410	五针Φ16航空接头 带10m屏蔽电缆 接收单元 Five-pin Φ16 aviation joint with 10m shielded cable	选配件 Spare parts
七针七芯数据线		QVW543	七针Φ16航空接头 带3m屏蔽电缆 接收单元 seven-hole Φ16 aviation joint with 3m shielded cable	标配 Standard
		QVW545	七针Φ16航空接头 带5m屏蔽电缆 接收单元 seven-hole Φ16 aviation joint with 5m shielded cable	选配件 Spare parts
		QVW5410	七针Φ16航空接头 带10m屏蔽电缆 接收单元 seven-hole Φ16 aviation joint with 10m shielded cable	选配件 Spare parts
五针五芯电缆		QC543	五针Φ12航空接头 带3m屏蔽电缆 接收单元 Five-pin Φ12 aviation joint with 3m shielded cable Receiver	标配 Standard
		QC545	五针Φ12航空接头 带5m屏蔽电缆 接收单元 Five-pin Φ12 aviation joint with 5m shielded cable Receiver	选配件 Spare parts
		QC5410	五针Φ12航空接头 带10m屏蔽电缆 接收单元 Five-pin Φ12 aviation joint with 10m shielded cable Receiver	选配件 Spare parts
四孔四芯电缆		QC433	四孔Φ12航空接头 带3m屏蔽电缆 接收单元 Four-hole Φ12 aviation joint with 3m shielded cable	标配 Standard
		QC435	四孔Φ12航空接头 带5m屏蔽电缆 接收单元 Four-hole Φ12 aviation joint with 5m shielded cable	选配件 Spare parts
		QC4310	四孔Φ12航空接头 带10m屏蔽电缆 接收单元 Four-hole Φ12 aviation joint with 10m shielded cable	选配件 Spare parts
七针七芯数据线		QT702	七针Φ16航空接头 带2m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 2m External controller	标配 Standard
		QT703	七针Φ16航空接头 带3m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 3m External controller	选配件 Spare parts
		QT705	七针Φ16航空接头 带5m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 5m External controller	选配件 Spare parts
七针七芯数据线		QE702	七针Φ16航空接头 带2m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 2m External controller	标配 Standard
		QE703	七针Φ16航空接头 带3m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 3m External controller	选配件 Spare parts
		QE705	七针Φ16航空接头 带5m屏蔽电缆 外置控制器 seven-pin Φ16 aviation joint with 5m External controller	选配件 Spare parts

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配件表 Accessory table

七孔七芯数据线		QSW702	七孔Φ16航空接头 带2m屏蔽电缆 外置控制器 seven-hole Φ16 aviation joint with 2m data cable	标配 Standard
		QSW703	七孔Φ16航空接头 带3m屏蔽电缆 外置控制器 seven-hole Φ16 aviation joint with 3m data cable	选配件 Spare parts
		QSW705	七孔Φ16航空接头 带5m屏蔽电缆 外置控制器 seven-hole Φ16 aviation joint with 5m data cable	选配件 Spare parts
五孔五芯数据线		QM/QR QZ/QB 503	五孔Φ12航空接头 带3m电缆数据线 five-hole Φ12 aviation joint with 3m data cable	标配 Standard
		QM/QR QZ/QB 505	五孔Φ12航空接头 带5m电缆数据线 five-hole Φ12 aviation joint with 5m data cable	选配件 Spare parts
		QM/QR QZ/QB 508	五孔Φ12航空接头 带8m电缆数据线 five-hole Φ12 aviation joint with 8m data cable	选配件 Spare parts
七孔七芯数据线		QL/QM 503	七孔Φ12航空接头 带3m电缆数据线 seven-hole Φ12 aviation joint with 3m data cable	标配 Standard
		QL/QM 505	七孔Φ12航空接头 带5m电缆数据线 seven-hole Φ12 aviation joint with 5m data cable	选配件 Spare parts
		QL/QM 508	七孔Φ12航空接头 带8m电缆数据线 seven-hole Φ12 aviation joint with 8m data cable	选配件 Spare parts
二孔四孔数据线		QG2403	二孔、四孔Φ12航空接头 带3m电缆数据线 two-hole, four-hole Φ12 aviation joint with 3m data cable	标配 Standard
		QG2405	二孔、四孔Φ12航空接头 带3m电缆数据线 two-hole, four-hole Φ12 aviation joint with 3m data cable	选配件 Spare parts
		QG2408	二孔、四孔Φ12航空接头 带3m电缆数据线 two-hole, four-hole Φ12 aviation joint with 3m data cable	选配件 Spare parts
不锈钢管支架		CCA-01	用于CCT、CAT管状安装方式 For CCT, CAT tubular installation	标配件 Standard
丁形螺丝		CCA-02	用于CCT、CAT侧面滑槽安装方式 For CCT, CAT side chute installation	标配件 Standard
凸形螺母		CCA-03	用于CCT、CAT侧面滑槽安装方式 For CCT, CAT side chute installation	标配件 Standard

注：标配件...免费配送 选配件...需单独购买 标配件：QCA-02 QCA-03 QCA-04 任选一款，QS型：QCA-01为标配件。
Note: Standard accessories... Free distribution. Optional accessories... Need to be purchased separately. Standard accessories: QCA-02,QCA-03,QCA-04 Optional one, QS type: QCA-01 is the standard accessory.

直角架		CCA-04	用于CCT、CAT两头安装方式 For CCT, CATside chute installation	标配件 Standard
侧面支角架		CCA-05	用于CCT/CAT/CST侧面固定 For CCT/CAT/CSTside fixing	标配件 Standard
直角架		CLMR-06	用于CLT、CMT、CR两头安装方式 For CLT, CMT, CR two-head installation	标配件 Standard
直角架		CRFT-07	用于CRFT两头安装方式 For CRFTtwo-head installation	标配件 Standard
高强度管状支架		CSA-07	用于CST、CAT管状安装方式 For CST, CATtubular installation	标配件 Spare parts
侧面直角架		CSA-08	用于CST/CAT/CVT/CTT侧面安装方式 For CST/CAT/CVT/CTT Side mounting method	标配件 Spare parts
正面直角架		CSA-09	用于CST/CAT/CVT/CTT正面安装方式 For CST/CAT/CVT/CTT Frontal mounting method	标配件 Spare parts
反射装置		CSA-10	用于CST/CAT/CVT/CTT两面或三面反射器的配件 For CST/CAT/CVT/CTT Accessories for 2 or 3-sided reflectors	标配件 Spare parts