

# LSMT系列安全光栅



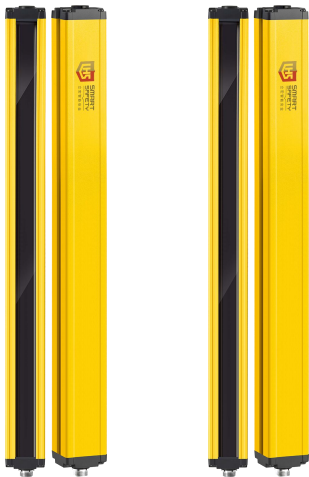
SMART  
SAFETY  
立宏智能安全



专为您量身定制智能安全产品

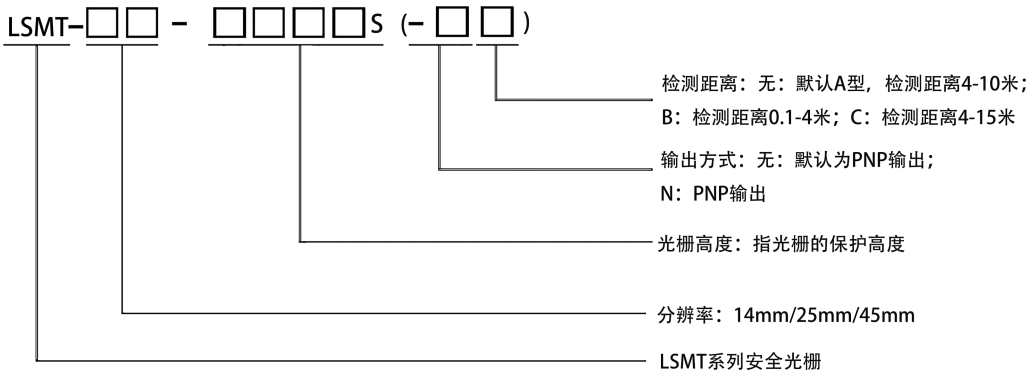


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- 多种规格尺寸、安装方便、接线简单
- 完善的自检功能,高分辨率
- LED指示工作及故障状态
- OSSD输出，适用于伤害程度较高场合
- 抗电磁、光干扰
- 抗震、防水、防尘

型号说明



说明：1、光栅默认输出方式为PNP；可在型号后加-N，选配NPN输出方式  
2、光栅默认检测距离为A型：4-10米；可在型号后加-B，选配检测距离0.1m-4m，可在型号后加-C，选配检测距离4-15米

规格型号

| 光轴间距10mm，分辨率14mm(上盲区17mm，下盲区44mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-14-0070S                     | 14      | 8   | 70       | 164     |
| LSMT-14-0090S                     | 14      | 10  | 90       | 184     |
| LSMT-14-0110S                     | 14      | 12  | 110      | 204     |
| LSMT-14-0130S                     | 14      | 14  | 130      | 224     |
| LSMT-14-0150S                     | 14      | 16  | 150      | 244     |
| LSMT-14-0170S                     | 14      | 18  | 170      | 264     |

| 光轴间距10mm，分辨率14mm(上盲区17mm，下盲区44mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-14-0190S                     | 14      | 20  | 190      | 284     |
| LSMT-14-0210S                     | 14      | 22  | 210      | 304     |
| LSMT-14-0230S                     | 14      | 24  | 230      | 324     |
| LSMT-14-0250S                     | 14      | 26  | 250      | 344     |
| LSMT-14-0270S                     | 14      | 28  | 270      | 364     |
| LSMT-14-0290S                     | 14      | 30  | 290      | 384     |
| LSMT-14-0310S                     | 14      | 32  | 310      | 404     |
| LSMT-14-0330S                     | 14      | 34  | 330      | 424     |
| LSMT-14-0350S                     | 14      | 36  | 350      | 444     |
| LSMT-14-0370S                     | 14      | 38  | 370      | 464     |
| LSMT-14-0390S                     | 14      | 40  | 390      | 484     |
| LSMT-14-0410S                     | 14      | 42  | 410      | 504     |
| LSMT-14-0430S                     | 14      | 44  | 430      | 524     |
| LSMT-14-0450S                     | 14      | 46  | 450      | 544     |
| LSMT-14-0470S                     | 14      | 48  | 470      | 564     |
| LSMT-14-0490S                     | 14      | 50  | 490      | 584     |
| LSMT-14-0510S                     | 14      | 52  | 510      | 604     |
| LSMT-14-0530S                     | 14      | 54  | 530      | 624     |
| LSMT-14-0550S                     | 14      | 56  | 550      | 644     |
| LSMT-14-0570S                     | 14      | 58  | 570      | 664     |
| LSMT-14-0590S                     | 14      | 60  | 590      | 684     |
| LSMT-14-0610S                     | 14      | 62  | 610      | 704     |
| LSMT-14-0630S                     | 14      | 64  | 630      | 724     |
| LSMT-14-0650S                     | 14      | 66  | 650      | 744     |
| LSMT-14-0670S                     | 14      | 68  | 670      | 764     |
| LSMT-14-0690S                     | 14      | 70  | 690      | 784     |
| LSMT-14-0710S                     | 14      | 72  | 710      | 804     |
| LSMT-14-0730S                     | 14      | 74  | 730      | 824     |

| 光轴间距10mm，分辨率14mm(上盲区17mm，下盲区44mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-14-0750S                     | 14      | 76  | 750      | 844     |
| LSMT-14-0770S                     | 14      | 78  | 770      | 864     |
| LSMT-14-0790S                     | 14      | 80  | 790      | 884     |
| LSMT-14-0810S                     | 14      | 82  | 810      | 904     |
| LSMT-14-0830S                     | 14      | 84  | 830      | 924     |
| LSMT-14-0850S                     | 14      | 86  | 850      | 944     |
| LSMT-14-0870S                     | 14      | 88  | 870      | 964     |
| LSMT-14-0890S                     | 14      | 90  | 890      | 984     |
| LSMT-14-0910S                     | 14      | 92  | 910      | 1004    |
| LSMT-14-0930S                     | 14      | 94  | 930      | 1024    |
| LSMT-14-0950S                     | 14      | 96  | 950      | 1044    |
| LSMT-14-0970S                     | 14      | 98  | 970      | 1064    |
| LSMT-14-0990S                     | 14      | 100 | 990      | 1084    |
| LSMT-14-1010S                     | 14      | 102 | 1010     | 1104    |
| LSMT-14-1030S                     | 14      | 104 | 1030     | 1124    |
| LSMT-14-1050S                     | 14      | 106 | 1050     | 1144    |
| LSMT-14-1070S                     | 14      | 108 | 1070     | 1164    |
| LSMT-14-1090S                     | 14      | 110 | 1090     | 1184    |
| LSMT-14-1110S                     | 14      | 112 | 1110     | 1204    |
| LSMT-14-1130S                     | 14      | 114 | 1130     | 1224    |
| LSMT-14-1150S                     | 14      | 116 | 1150     | 1244    |
| LSMT-14-1170S                     | 14      | 118 | 1170     | 1264    |
| LSMT-14-1190S                     | 14      | 120 | 1190     | 1284    |
| LSMT-14-1210S                     | 14      | 122 | 1210     | 1304    |
| LSMT-14-1230S                     | 14      | 124 | 1230     | 1324    |
| LSMT-14-1250S                     | 14      | 126 | 1250     | 1344    |
| LSMT-14-1270S                     | 14      | 128 | 1270     | 1364    |
| LSMT-14-1290S                     | 14      | 130 | 1290     | 1384    |

| 光轴间距10mm，分辨率14mm(上盲区17mm，下盲区44mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-14-1310S                     | 14      | 132 | 1310     | 1404    |
| LSMT-14-1330S                     | 14      | 134 | 1330     | 1424    |
| LSMT-14-1350S                     | 14      | 136 | 1350     | 1444    |
| LSMT-14-1370S                     | 14      | 138 | 1370     | 1464    |
| LSMT-14-1390S                     | 14      | 140 | 1390     | 1484    |
| LSMT-14-1410S                     | 14      | 142 | 1410     | 1504    |
| LSMT-14-1430S                     | 14      | 144 | 1430     | 1524    |

| 光轴间距20mm，分辨率25mm(上盲区22mm，下盲区49mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-25-0060S                     | 25      | 4   | 60       | 164     |
| LSMT-25-0100S                     | 25      | 6   | 100      | 204     |
| LSMT-25-0140S                     | 25      | 8   | 140      | 244     |
| LSMT-25-0180S                     | 25      | 10  | 180      | 284     |
| LSMT-25-0220S                     | 25      | 12  | 220      | 324     |
| LSMT-25-0260S                     | 25      | 14  | 260      | 364     |
| LSMT-25-0300S                     | 25      | 16  | 300      | 404     |
| LSMT-25-0340S                     | 25      | 18  | 340      | 444     |
| LSMT-25-0380S                     | 25      | 20  | 380      | 484     |
| LSMT-25-0420S                     | 25      | 22  | 420      | 524     |
| LSMT-25-0460S                     | 25      | 24  | 460      | 564     |
| LSMT-25-0500S                     | 25      | 26  | 500      | 604     |
| LSMT-25-0540S                     | 25      | 28  | 540      | 644     |
| LSMT-25-0580S                     | 25      | 30  | 580      | 684     |
| LSMT-25-0620S                     | 25      | 32  | 620      | 724     |
| LSMT-25-0660S                     | 25      | 34  | 660      | 764     |
| LSMT-25-0700S                     | 25      | 36  | 700      | 804     |
| LSMT-25-0740S                     | 25      | 38  | 740      | 844     |

| 光轴间距20mm，分辨率25mm(上盲区22mm，下盲区49mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-25-0780S                     | 25      | 40  | 780      | 884     |
| LSMT-25-0820S                     | 25      | 42  | 820      | 924     |
| LSMT-25-0860S                     | 25      | 44  | 860      | 964     |
| LSMT-25-0900S                     | 25      | 46  | 900      | 1004    |
| LSMT-25-0940S                     | 25      | 48  | 940      | 1044    |
| LSMT-25-0980S                     | 25      | 50  | 980      | 1084    |
| LSMT-25-1020S                     | 25      | 52  | 1020     | 1124    |
| LSMT-25-1060S                     | 25      | 54  | 1060     | 1164    |
| LSMT-25-1100S                     | 25      | 56  | 1100     | 1204    |
| LSMT-25-1140S                     | 25      | 58  | 1140     | 1244    |
| LSMT-25-1180S                     | 25      | 60  | 1180     | 1284    |
| LSMT-25-1220S                     | 25      | 62  | 1220     | 1324    |
| LSMT-25-1260S                     | 25      | 64  | 1260     | 1364    |
| LSMT-25-1300S                     | 25      | 66  | 1300     | 1404    |
| LSMT-25-1340S                     | 25      | 68  | 1340     | 1444    |
| LSMT-25-1380S                     | 25      | 70  | 1380     | 1484    |
| LSMT-25-1420S                     | 25      | 72  | 1420     | 1524    |
| LSMT-25-1460S                     | 25      | 74  | 1460     | 1564    |
| LSMT-25-1500S                     | 25      | 76  | 1500     | 1604    |
| LSMT-25-1540S                     | 25      | 78  | 1540     | 1644    |
| LSMT-25-1580S                     | 25      | 80  | 1580     | 1684    |
| LSMT-25-1620S                     | 25      | 82  | 1620     | 1724    |
| LSMT-25-1660S                     | 25      | 84  | 1660     | 1764    |
| LSMT-25-1700S                     | 25      | 86  | 1700     | 1804    |
| LSMT-25-1740S                     | 25      | 88  | 1740     | 1844    |
| LSMT-25-1780S                     | 25      | 90  | 1780     | 1884    |
| LSMT-25-1820S                     | 25      | 92  | 1820     | 1924    |
| LSMT-25-1860S                     | 25      | 94  | 1860     | 1964    |
| LSMT-25-1900S                     | 25      | 96  | 1900     | 2004    |

| 光轴间距20mm，分辨率25mm(上盲区22mm，下盲区49mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-25-1940S                     | 25      | 98  | 1940     | 2044    |
| LSMT-25-1980S                     | 25      | 100 | 1980     | 2084    |
| LSMT-25-2020S                     | 25      | 102 | 2020     | 2124    |
| LSMT-25-2060S                     | 25      | 104 | 2060     | 2164    |
| LSMT-25-2100S                     | 25      | 106 | 2100     | 2204    |
| LSMT-25-2140S                     | 25      | 108 | 2140     | 2244    |
| LSMT-25-2180S                     | 25      | 110 | 2180     | 2284    |
| LSMT-25-2220S                     | 25      | 112 | 2220     | 2324    |
| LSMT-25-2260S                     | 25      | 114 | 2260     | 2364    |
| LSMT-25-2300S                     | 25      | 116 | 2300     | 2404    |
| LSMT-25-2340S                     | 25      | 118 | 2340     | 2444    |
| LSMT-25-2380S                     | 25      | 120 | 2380     | 2484    |
| LSMT-25-2420S                     | 25      | 122 | 2420     | 2524    |
| LSMT-25-2460S                     | 25      | 124 | 2460     | 2564    |
| LSMT-25-2500S                     | 25      | 126 | 2500     | 2604    |
| LSMT-25-2540S                     | 25      | 128 | 2540     | 2644    |
| LSMT-25-2580S                     | 25      | 130 | 2580     | 2684    |
| LSMT-25-2620S                     | 25      | 132 | 2620     | 2724    |
| LSMT-25-2660S                     | 25      | 134 | 2660     | 2764    |
| LSMT-25-2700S                     | 25      | 136 | 2700     | 2804    |
| LSMT-25-2740S                     | 25      | 138 | 2740     | 2844    |
| LSMT-25-2780S                     | 25      | 140 | 2780     | 2884    |
| LSMT-25-2820S                     | 25      | 142 | 2820     | 2924    |
| LSMT-25-2860S                     | 25      | 144 | 2860     | 2964    |

| 光轴间距40mm，分辨率45mm(上盲区32mm，下盲区59mm) |         |     |          |         |
|-----------------------------------|---------|-----|----------|---------|
| 型号                                | 分辨率（mm） | 光轴数 | 保护高度（mm） | 总长度（mm） |
| LSMT-45-0120S                     | 45      | 4   | 120      | 244     |
| LSMT-45-0200S                     | 45      | 6   | 200      | 324     |
| LSMT-45-0280S                     | 45      | 8   | 280      | 404     |
| LSMT-45-0360S                     | 45      | 10  | 360      | 484     |
| LSMT-45-0440S                     | 45      | 12  | 440      | 564     |
| LSMT-45-0520S                     | 45      | 14  | 520      | 644     |
| LSMT-45-0600S                     | 45      | 16  | 600      | 724     |
| LSMT-45-0680S                     | 45      | 18  | 680      | 804     |
| LSMT-45-0760S                     | 45      | 20  | 760      | 884     |
| LSMT-45-0840S                     | 45      | 22  | 840      | 964     |
| LSMT-45-0920S                     | 45      | 24  | 920      | 1044    |
| LSMT-45-1000S                     | 45      | 26  | 1000     | 1124    |
| LSMT-45-1080S                     | 45      | 28  | 1080     | 1204    |
| LSMT-45-1160S                     | 45      | 30  | 1160     | 1284    |
| LSMT-45-1240S                     | 45      | 32  | 1240     | 1364    |
| LSMT-45-1320S                     | 45      | 34  | 1320     | 1444    |
| LSMT-45-1400S                     | 45      | 36  | 1400     | 1524    |
| LSMT-45-1480S                     | 45      | 38  | 1480     | 1604    |
| LSMT-45-1560S                     | 45      | 40  | 1560     | 1684    |
| LSMT-45-1640S                     | 45      | 42  | 1640     | 1764    |
| LSMT-45-1720S                     | 45      | 44  | 1720     | 1844    |
| LSMT-45-1800S                     | 45      | 46  | 1800     | 1924    |
| LSMT-45-1880S                     | 45      | 48  | 1880     | 2004    |
| LSMT-45-1960S                     | 45      | 50  | 1960     | 2084    |
| LSMT-45-2040S                     | 45      | 52  | 2040     | 2164    |
| LSMT-45-2120S                     | 45      | 54  | 2120     | 2244    |
| LSMT-45-2200S                     | 45      | 56  | 2200     | 2324    |
| LSMT-45-2280S                     | 45      | 58  | 2280     | 2404    |
| LSMT-45-2360S                     | 45      | 60  | 2360     | 2484    |
| LSMT-45-2440S                     | 45      | 62  | 2440     | 2564    |
| LSMT-45-2520S                     | 45      | 64  | 2520     | 2644    |
| LSMT-45-2600S                     | 45      | 66  | 2600     | 2724    |
| LSMT-45-2680S                     | 45      | 68  | 2680     | 2804    |
| LSMT-45-2760S                     | 45      | 70  | 2760     | 2884    |
| LSMT-45-2840S                     | 45      | 72  | 2840     | 2964    |

| 执行标准              |                                             |
|-------------------|---------------------------------------------|
| 符合标准              | EN 6149 6-2:2013                            |
| 安全类别              |                                             |
| 安全等级              | Type 4                                      |
| DC <sub>avg</sub> | 99%                                         |
| CCF               | 100                                         |
| 光学特性              |                                             |
| 光轴间距              | 10mm/20mm/40mm                              |
| 分辨率               | 14mm/25mm/45mm                              |
| 光轴数量              | 4、6、8、10...144                              |
| 保护高息              | 光轴间距×（光轴数量-1）                               |
| 保护宽度              | 默认为A型：4-10m，可选配B：0.1-4m、C型：4-15m            |
| 截面尺寸              | 35mm×35mm                                   |
| 电气特性              |                                             |
| 电源电压              | 24V ± 10%                                   |
| 功率                | 3~8W                                        |
| 响应时间              | ≤10ms                                       |
| 绝缘电阻              | ≥100MΩ                                      |
| 信号输出              | NPN、PNP                                     |
| 工作温度              | - 10℃~+55℃                                  |
| 储存温度              | - 40℃ ~+70℃                                 |
| 工作湿度              | 35%RH~85% RH                                |
| 抗光干扰              | 10000LUX                                    |
| 光幕形式              | 对射型                                         |
| 防护等级              | IP69                                        |
| 产品认证              | CE                                          |
| 电路保护              | 反接保护/输出短路保护，双路电路控制系统，自我诊断进行故障检查，更高级别冗余故障互检等 |
| 可配控制器             | 是                                           |

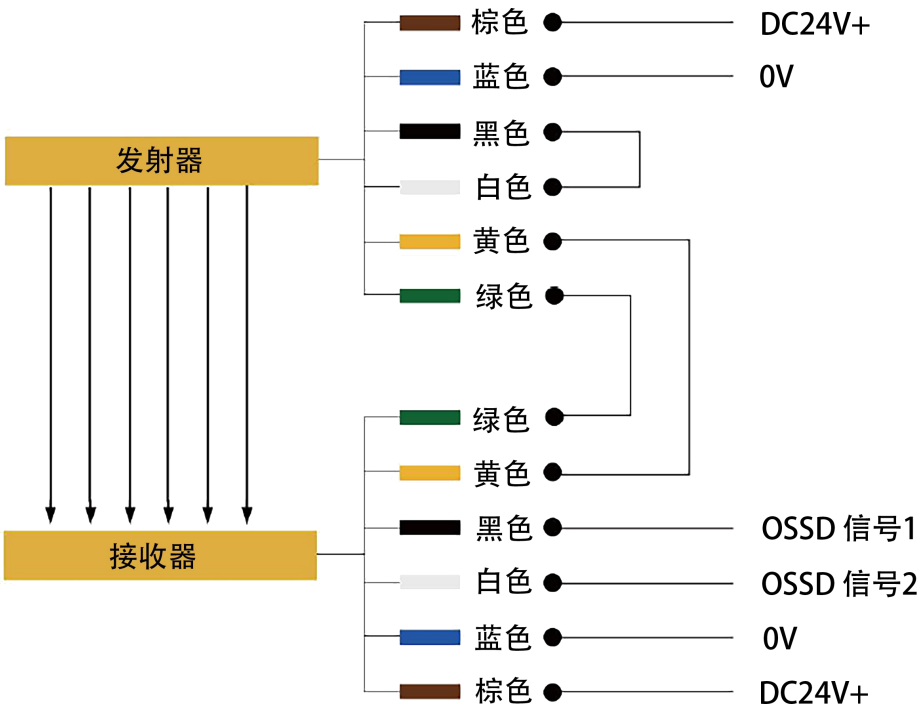
| 部件  | 航空插件管脚 | 导线颜色 | 功能作用      | 备注            |
|-----|--------|------|-----------|---------------|
| 发射器 | 1      | 蓝色   | 0V        | 电源负极          |
|     | 2      | 棕色   | DC12V-24V | 电源正极          |
|     | 3      | 黄色   | CP-       | 发、受光器同步线      |
|     | 4      | 绿色   | CP+       | 发、受光器同步线      |
|     | 5      | 白色   | OSSD3     | 辅助输出          |
|     | 6      | 黑色   | EDM       | 外部触点监控功能      |
| 接收器 | 1      | 蓝色   | 0V        | 电源负极          |
|     | 2      | 棕色   | DC12V-24V | 电源正极          |
|     | 3      | 黄色   | CP-       | 发、受光器同步线      |
|     | 4      | 绿色   | CP+       | 发、受光器同步线      |
|     | 5      | 白色   | OSSD1     | NPN/PNP输出(指定) |
|     | 6      | 黑色   | OSSD2     | NPN/PNP输出(指定) |

状态指示灯说明

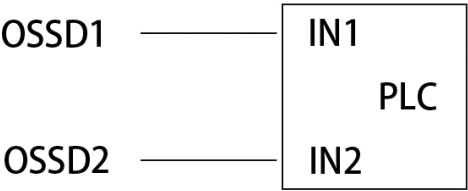
| 发射器状态指示说明 |         |          |               |
|-----------|---------|----------|---------------|
| 部件名称      | 蓝灯 (ON) | 红灯 (OFF) | 传感器状态说明       |
| 发射器       | 常亮      | 常灭       | 通光状态          |
|           | 常灭      | 常亮       | 遮光状态          |
|           | 常灭      | 闪烁       | 故障状态：通信线缆异常   |
|           | 常灭      | 闪烁       | 故障状态：内部电路自检故障 |
|           | 闪烁      | 常灭       | 故障状态：EDM异常    |

| 接收器状态指示说明 |         |          |               |
|-----------|---------|----------|---------------|
| 部件名称      | 蓝灯 (ON) | 红灯 (OFF) | 传感器状态说明       |
| 接收器       | 常亮      | 常灭       | 通光状态          |
|           | 常灭      | 常亮       | 遮光状态          |
|           | 常灭      | 闪烁       | 故障状态：内部电路自检故障 |

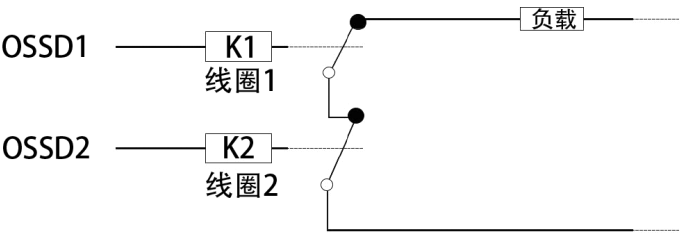
常规接线图



①双信号接入PLC时，需接两路独立输入点

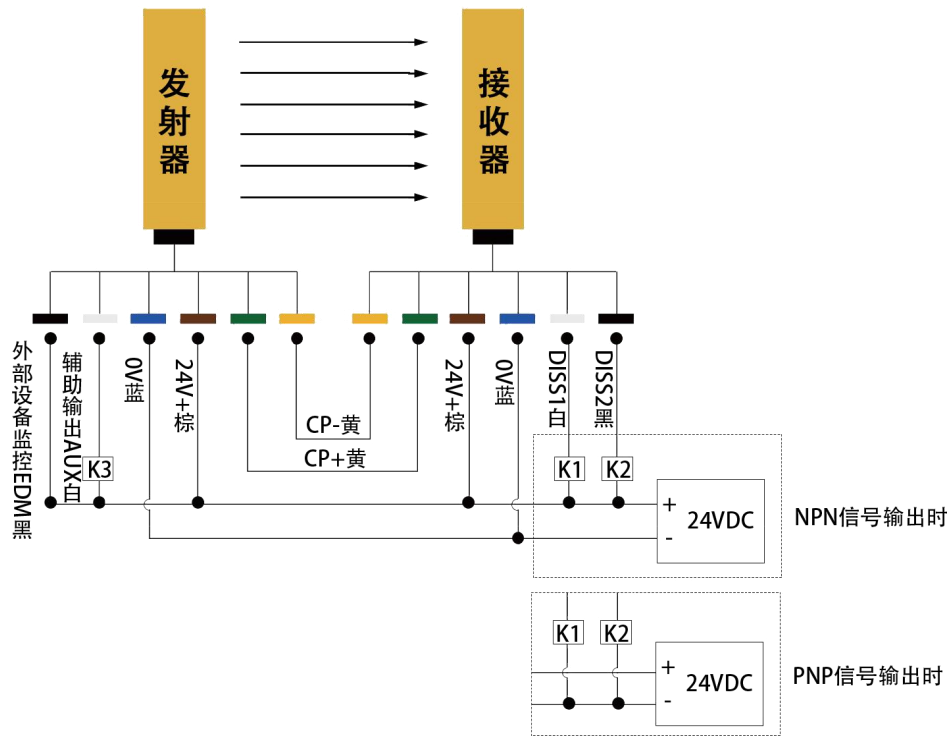


②双信号接两个中间继电器时，可按下图接线



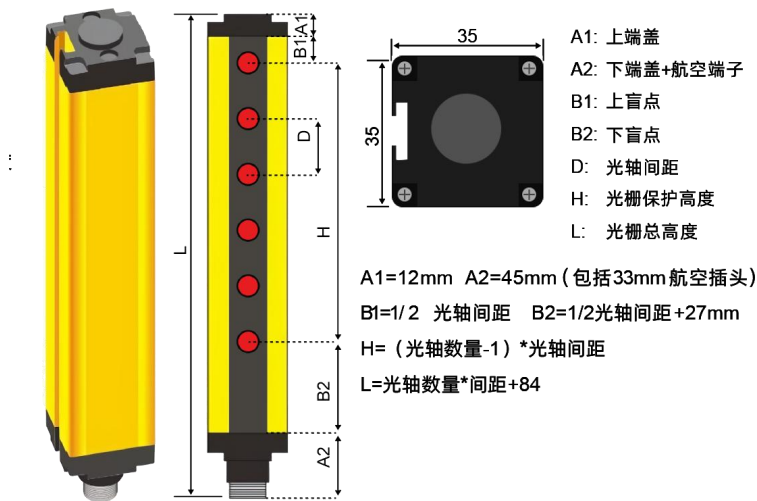
双信号独立控制两个继电器线圈(K1、K2)并通过输出触点串联成一路来控制负载电路，如果一路信号失效，另一路信号依然可以起到保护作用。

使用EDM功能时接线图



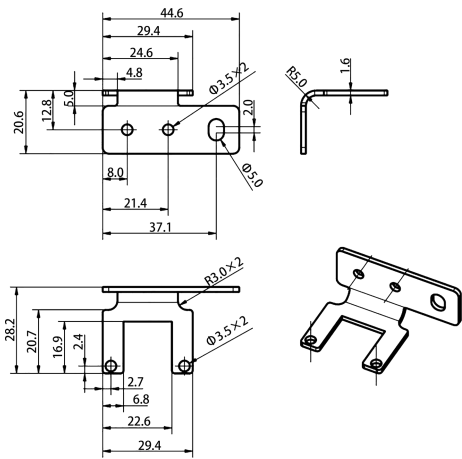
功能说明:

- 1、接收器的白OSSD1黑OSSD2线为两个独立输出信号，K1K2为外部受控负载(比如继电器线圈)。NPN型号控制负载的负极，PNP型号控制负载的正极。
- 2、发射器的黑色线为EDM功能线，是用来检测外部继电器K1,K2是否响应延迟故障或者触点黏连。外部继电器需要提供一组独立的触点用于此功能。EDM功能不使用时，请务必将发射的黑色线连到发射器的白色线上。
- 3、发射器的白色线为辅助输出信号，通光时输出NPN信号，该信号与光栅输出信号同步变化，一般作为辅助输出信号，可以接报警器K3等。不使用时，请将线头包扎绝缘处理。

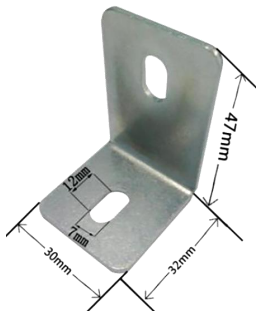


支架尺寸图

上下安装支架



L型侧装支架



钢管支架

