#### **EB15 Series**

## **Ultra-thin Safety Light Curtain**



#### Product Introduction

EB15 series with special ultra-thin structure, 15mm thickness side emitting infrared light, with easy mounting and wire connection; Quick response time for high performance.

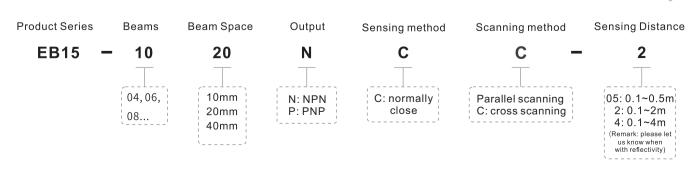
#### **₽ Product Feature**

- 15mm ultra-thin light emitting;
- Quick response;
- Lower wide voltage DC10-30V;
- Strong ability against interference of electromagnet of different motor;
- Wire synchronization against light interference;
- Screw fixing mounting ensure easy installation;
- Sectional size 39\*15mm.

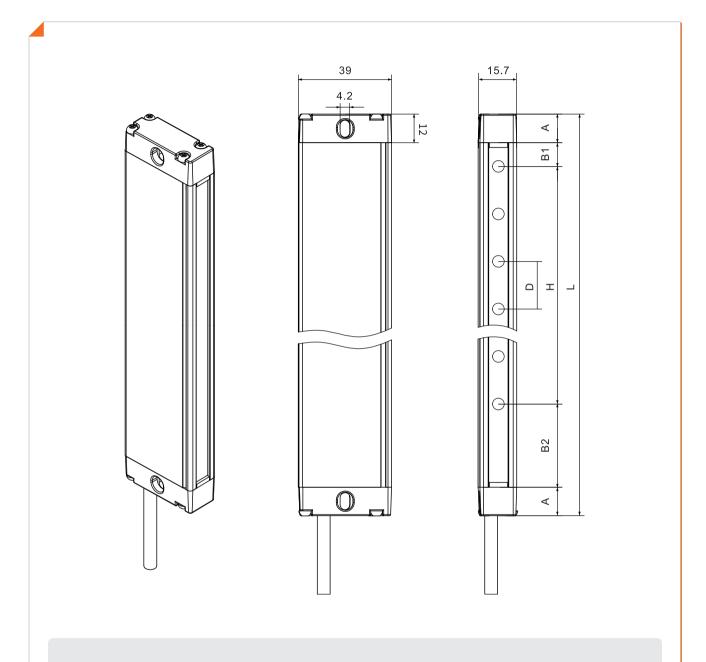
#### **≅** Product Parameter

| Power Supply                    | DC10V~30V  |  |  |
|---------------------------------|--|--|--|
| Capacity                        | <5W  |  |  |
| Beam Space                      | 10mm, 20mm, 40mm   |  |  |
| Resolution                      | 15mm, 25mm, 45mm   |  |  |
|                                 | 10mm: 8, 12, 16,160  |  |  |
| Beams                           | 20mm: 4, 6, 8,80   |  |  |
|                                 | 40mm: 4, 6, 8,40   |  |  |
| Protective Height               | Protection height=(N-1)*beam space, (N is beams)   |  |  |
| Light Wavelength                | 940nm  |  |  |
| Response Time                   | Response Time= (N * 0.1ms) + 0.4ms (N is beams)  |  |  |
| Safety Output<br>(OSSD)         | PNP or NPN  Load current ≤ 200mA, residual voltage ≤ 1V (except for voltage drop caused by cable extension) and leakage current ≤ 1mA. |  |  |
| Protective Circuit              | Overvoltage protection, power supply reverse protection and overcurrent protection.  |  |  |
| Sensing Distance                | 0.1~0.5m, 0.1~2m, 0.1~4m (Remark; If any light reflecting, please let us know)   |  |  |
| Against Optical<br>Interference | 10000 Lux (angle>5°)   |  |  |
| Sensing Method                  | Thru-beam  |  |  |
| Synchronization                 | Wire synchronization   |  |  |
| Enclosure<br>Material           | Aluminum alloy   |  |  |
| Enclosure<br>Protection Rate    | IP54   |  |  |
| Sectional Size                  | 39*15mm  |  |  |
| Ambient Operating Temperature   | -10°C~55°C (no freezing)   |  |  |
| Storage<br>Temperature          | -30°C~70°C (no freezing)   |  |  |
| Ambient Operating Humidity      | When temperature 20°C, the humidity max. 85%   |  |  |

### ✓ Model Selection (e.g.: EB15-1020NCC-2)



#### Product Size



A: Up & bottom cover

B1: Up blind area

B2: Bottom blind area

D: Beam space (10mm/20mm/40mm)

H: Protection height

L: Total Height

A is 12mm

When D=10mm, B1=5mm, B2=5mm

When D=20mm, B1=5mm, B2=15mm

When D=40mm, B1=5mm, B2=15mm

H=(Beams-1)\*beam space

L=A+B1+B2+H

#### **B** EB15 Model Selection Table

• Beam space 10mm, resolution 15mm

| Picture                                     | Beams<br>(n) | Protection Height (mm) | Total Height<br>(mm) | Model      |
|---|--------------|------------------------|----------------------|------------|
|   | 08           | 70                     | 104                  | EB15-0810  |
|   | 12           | 110                    | 144                  | EB15-1210  |
|   | 16           | 150                    | 184                  | EB15-1610  |
| ESPE  | 20           | 190                    | 224                  | EB15-2010  |
|   | 24           | 230                    | 264                  | EB15-2410  |
| 3-3-  | 28           | 270                    | 304                  | EB15-2810  |
| ②<br>①                                      | 32           | 310                    | 344                  | EB15-3210  |
|   | 36           | 350                    | 384                  | EB15-3610  |
|   | 40           | 390                    | 424                  | EB15-4010  |
|   | 44           | 430                    | 464                  | EB15-4410  |
|   | 48           | 470                    | 504                  | EB15-4810  |
| ST 21                                       | 52           | 510                    | 544                  | EB15-5210  |
| " <del>"</del>                              | 56           | 550                    | 584                  | EB15-5610  |
|   | 60           | 590                    | 624                  | EB15-6010  |
|   | 64           | 630                    | 664                  | EB15-6410  |
| ±   -                                       | 68           | 670                    | 704                  | EB15-6810  |
|   | 72           | 710                    | 744                  | EB15-7210  |
|   | 76           | 750                    | 784                  | EB15-7610  |
| w   O   O                                   | 80           | 790                    | 824                  | EB15-8010  |
| 27  | 84           | 830                    | 864                  | EB15-8410  |
|   | 88           | 870                    | 904                  | EB15-8810  |
| Front View                                  | 92           | 910                    | 944                  | EB15-9210  |
|   | 96           | 950                    | 984                  | EB15-9610  |
|   | 100          | 990                    | 1024                 | EB15-10010 |
|   | 104          | 1030                   | 1064                 | EB15-10410 |
| 39  | 108          | 1070                   | 1104                 | EB15-10810 |
| 5.7   | 112          | 1110                   | 1144                 | EB15-11210 |
| Top View                                    | 116          | 1150                   | 1184                 | EB15-11610 |
|   | 120          | 1190                   | 1224                 | EB15-12010 |
|   | 124          | 1230                   | 1264                 | EB15-12410 |
| H is protection height=(beams-1)*beam space | 128          | 1270                   | 1304                 | EB15-12810 |
| L is total height=end covers+ up & bottom   |              |                        |                      |            |
| blind area + protection height              | 160          | 1590                   | 1624                 | EB15-16010 |

Remark: Besides above model, other curtains can be customized.

#### **B** EB15 Model Selection Table

• Beam space 20mm, resolution 25mm

| Picture                                     | Beams<br>(n) | Protection Height (mm) | Total Height<br>(mm) | Model     |
|---|--------------|------------------------|----------------------|-----------|
|   | 04           | 60                     | 104                  | EB15-0420 |
|   | 06           | 100                    | 144                  | EB15-0620 |
|   | 08           | 140                    | 184                  | EB15-0820 |
| SPE   | 10           | 180                    | 224                  | EB15-1020 |
|   | 12           | 220                    | 264                  | EB15-1220 |
| 3   | 14           | 260                    | 304                  | EB15-1420 |
| ②<br>①                                      | 16           | 300                    | 344                  | EB15-1620 |
|   | 18           | 340                    | 384                  | EB15-1820 |
|   | 20           | 380                    | 424                  | EB15-2020 |
|   | 22           | 420                    | 464                  | EB15-2220 |
|   | 24           | 460                    | 504                  | EB15-2420 |
| 7 7 7                                       | 26           | 500                    | 544                  | EB15-2620 |
| v. 1  | 28           | 540                    | 584                  | EB15-2820 |
|   | 30           | 580                    | 624                  | EB15-3020 |
| ,   | 32           | 620                    | 664                  | EB15-3220 |
| ~   T   -                                   | 34           | 660                    | 704                  | EB15-3420 |
|   | 36           | 700                    | 744                  | EB15-3620 |
|   | 38           | 740                    | 784                  | EB15-3820 |
| ± 1   | 40           | 780                    | 824                  | EB15-4020 |
| <u>-</u>                                    | 42           | 820                    | 864                  | EB15-4220 |
|   | 44           | 860                    | 904                  | EB15-4420 |
| Front View                                  | 46           | 900                    | 944                  | EB15-4620 |
|   | 48           | 940                    | 984                  | EB15-4820 |
|   | 50           | 980                    | 1024                 | EB15-5020 |
|   | 52           | 1020                   | 1064                 | EB15-5220 |
| 39  | 54           | 1060                   | 1104                 | EB15-5420 |
| 15.7  | 56           | 1100                   | 1144                 | EB15-5620 |
| Top View                                    | 58           | 1140                   | 1184                 | EB15-5820 |
|   | 60           | 1180                   | 1224                 | EB15-6020 |
|   | 62           | 1220                   | 1264                 | EB15-6220 |
| H is protection height=(beams-1)*beam space | 64           | 1260                   | 1304                 | EB15-6420 |
| L is total height=end covers+ up & bottom   |              |                        |                      |           |
| blind area + protection height              | 80           | 1580                   | 1624                 | EB15-8020 |

Remark: Besides above model, other curtains can be customized.

#### **B** EB15 Model Selection Table

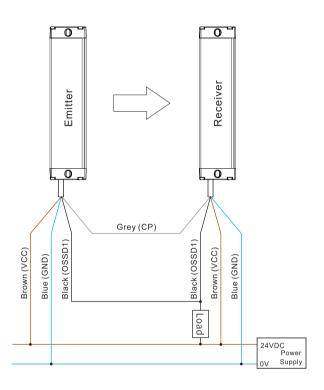
• Beam space 40mm, resolution 45mm

|                  | Picture  | Beams<br>(n) | Protection Height (mm) | Total Height<br>(mm) | Model     |
|------------------|--|--------------|------------------------|----------------------|-----------|
|                  |  | 04           | 120                    | 164                  | EB15-0440 |
| 0 3              | 0  | 06           | 200                    | 244                  | EB15-0640 |
| ES               |  | 08           | 280                    | 324                  | EB15-0840 |
| ESPE             | ESPE   | 10           | 360                    | 404                  | EB15-1040 |
|                  |  | 12           | 440                    | 484                  | EB15-1240 |
|                  | ③───   | 14           | 520                    | 564                  | EB15-1440 |
|                  | ②<br>①   | 16           | 600                    | 644                  | EB15-1640 |
|                  |  | 18           | 680                    | 724                  | EB15-1840 |
|                  |  | 20           | 760                    | 804                  | EB15-2040 |
|                  |  | 22           | 840                    | 884                  | EB15-2240 |
|                  |  | 24           | 920                    | 964                  | EB15-2440 |
|                  | 27 1   | 26           | 1000                   | 1044                 | EB15-2640 |
|                  | <b>□</b>                                       | 28           | 1080                   | 1124                 | EB15-2840 |
|                  |  | 30           | 1160                   | 1204                 | EB15-3040 |
|                  | 0 1 0  | 32           | 1240                   | 1284                 | EB15-3240 |
|                  | 1 - I  | 34           | 1320                   | 1364                 | EB15-3440 |
|                  |  | 36           | 1400                   | 1444                 | EB15-3640 |
|                  |  | 38           | 1480                   | 1524                 | EB15-3840 |
|                  | φ+   | 40           | 1560                   | 1604                 | EB15-4040 |
|                  | 27   |              |                        |                      |           |
|                  |  |              |                        |                      |           |
|                  | Front View                                     |              |                        |                      |           |
|                  |  |              |                        |                      |           |
|                  |  |              |                        |                      |           |
|                  |  |              |                        |                      |           |
|                  | . 39   |              |                        |                      |           |
|                  | 15.7   |              |                        |                      |           |
|                  | Top View                                       |              |                        |                      |           |
|                  |  |              |                        |                      |           |
|                  |  |              |                        |                      |           |
| H is protection  | n height=(beams-1)*beam space                  |              |                        |                      |           |
| L is total heigh | nt=end covers+ up & bottom<br>rotection height |              |                        |                      |           |

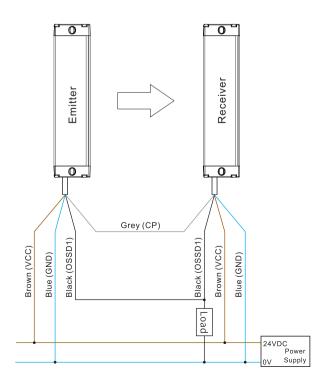
Remark: Besides above model, other curtains can be customized.

### ≪ Wire Diagram

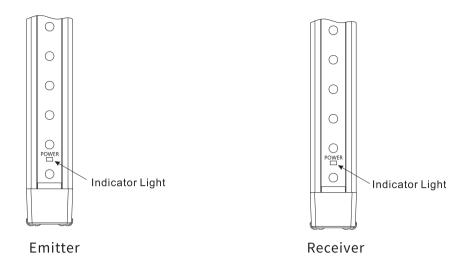
NPN



PNP



## Indicator Light



| Barrier Working State |                                       | EmitterIndicator  | Receiver Indicator |  |
|-----------------------|---------------------------------------|-------------------|--------------------|--|
| Normal state          | Beam through                          | Green steady ON   | Green steady ON    |  |
| Normai state          | Beam block                            | Green steady ON   | Red steady ON      |  |
| Abnormal state        | CP wire connecting error/<br>CP fault | Red 1Hz blink     | Red 2Hz blink      |  |
|                       | CP over current                       | Red 4Hz blink     | 1                  |  |
|                       | Overvoltage                           | Green 4Hz blink   | 1                  |  |
|                       | Undervoltage                          | Green 0.5Hz blink | I                  |  |

### Option of Bracket

| Picture  | Installation | Accessories        |
|--|--------------|--------------------|
| The state of the s | Screw fixing | M4*20 screw (4pcs) |