

Safety Light Curtains

Hand resolution SB4B-30 Series

CARLO GAVAZZI



- Safety Category 4
- Resolution 30 mm (hand)
- Protected height 180-1650 mm
- External Device Monitoring (EDM)
- Fixed Blanking and Floating Blanking
- Auto/Manual restart selectable
- Status/failure diagnosis by LED's
- Easy alignment and installation
- Compact profile
- Approvals:



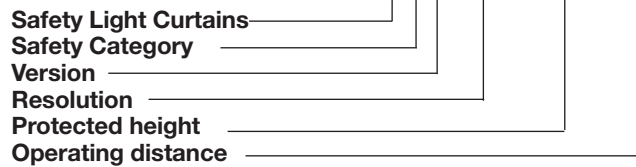
Product Description

Safety category 4 light curtains according to IEC 61496-1 and IEC 61496-2. The SB4B-30 series is featured by hand resolution and is provided with External Device Monitoring which allows to utilize these light curtains without external safety control unit. The Blanking function -

Fixed or Floating mode selectable - is used in those applications where material passage or mechanical obstacle presence must not cause machine interruption. The dip-switches placed in the slot provided in the receiving unit allow quick and safe configuration.

Ordering Key

SB4B 30 180 D15



Type Selection

| Protected height (mm) | Overall height (mm) | Number of beams | Response time (ms) | Ordering no. |
|-----------------------|---------------------|-----------------|--------------------|---------------|
| 180 (7.1 in.) | 256 | 8 | 16 | SB4B30180D15 |
| 327 (12.9 in.) | 403 | 16 | 20 | SB4B30327D15 |
| 474 (18.7 in.) | 550 | 24 | 23 | SB4B30474D15 |
| 621 (24.4 in.) | 697 | 32 | 25 | SB4B30621D15 |
| 768 (30.2 in.) | 844 | 40 | 27 | SB4B30768D15 |
| 915 (36.0 in.) | 991 | 48 | 30 | SB4B30915D15 |
| 1062 (41.8 in.) | 1138 | 56 | 32 | SB4B301062D15 |
| 1209 (47.6 in.) | 1285 | 64 | 35 | SB4B301209D15 |
| 1356 (53.4 in.) | 1432 | 72 | 38 | SB4B301356D15 |
| 1503 (59.2 in.) | 1579 | 80 | 40 | SB4B301503D15 |
| 1650 (65.0 in.) | 1726 | 88 | 43 | SB4B301650D15 |

General Specifications

| | | | |
|--------------------|--------------|------------|---|
| Safety category | type 4 | Resolution | 30 mm |
| Operating distance | 0,2.....15 m | Functions | EDM, fixed/floating BLANKING, automatic /manual restart |

Electrical Specifications

| | | | |
|----------------------|-----------------------|-----------------|---------------------------|
| Power supply | 24 Vdc ± 20% | Light emission | Infrared (880 nm) |
| Emitter consumption | 55 mA max | Output function | 2 PNP |
| Receiver consumption | 125 mA max (no load) | Output current | 0.5 A max (single output) |

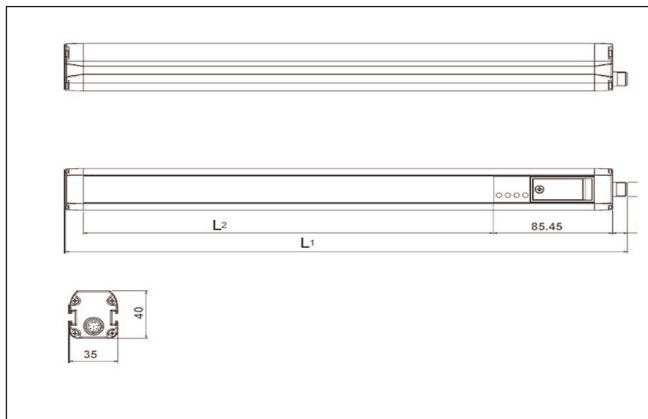
Environmental Specifications

| | | | |
|-----------------------|--------------|---------------------|--------------|
| Operating temperature | -10 ÷ + 55°C | Storage temperature | -25 ÷ + 70°C |
|-----------------------|--------------|---------------------|--------------|

Mechanical Specifications

| | | | |
|---------------------|---|-------------------|--|
| Receiver connection | M 12 8-poles poles Standard cable length 3, 5 or 10 m | Protection degree | IP 65 |
| Emitter connection | M 12 4-poles connector Standard cable length 3, 5 or 10 m | Housing material | Painted aluminium (yellow Ral 1003) |
| | | Weight | 1.2 Kg max/m of total height |

Dimensions



| MODEL | L1 (mm) | L2 (mm) |
|------------------|---------|---------|
| SB4y-30/190-D15 | 256 | 147 |
| SB4y-30/327-D15 | 403 | 294 |
| SB4y-30/474-D15 | 550 | 441 |
| SB4y-30/621-D15 | 697 | 588 |
| SB4y-30/768-D15 | 844 | 735 |
| SB4y-30/915-D15 | 991 | 882 |
| SB4y-30/1062-D15 | 1138 | 1029 |
| SB4y-30/1209-D15 | 1285 | 1176 |
| SB4y-30/1356-D15 | 1432 | 1323 |
| SB4y-30/1503-D15 | 1579 | 1470 |
| SB4y-30/1650-D15 | 1726 | 1617 |

y = EDM/ Blanking/Cascade versions

Wiring Diagrams

