

Safety Light Curtains

Finger resolution SB4M-14 Series

CARLO GAVAZZI



- Safety Category 4
- Resolution 14 mm (finger)
- Protected height 161-1190 mm
- External Device Monitoring (EDM)
- Fixed Blanking and Floating Blanking
- Cascade configuration
- Auto/Manual restart selectable
- Status/failure diagnosis by LED's
- Easy alignment and installation
- Compact profile
- Approvals:



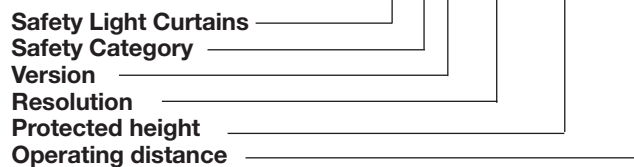
Product Description

Safety category 4 light curtains according to IEC 61496-1 and IEC 61496-2. The SB4M-14 series is featured by finger 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 cascade connection allows to combine the functioning of two light curtains - master and slave - placed in different positions. The dip-switches placed in the slot provided in the receiving unit allow quick and safe configuration.

Ordering Key

SB4M 14 161 D6



Type Selection

| Protected height (mm) | Overall height (mm) | Number of beams | Response time (ms) (Master) | Ordering no. Master | Ordering no. Slave |
|-----------------------|---------------------|-----------------|-----------------------------|---------------------|--------------------|
| 161 (6.3 in.) | 256 | 21 | 21 | SB4M14161D6 | SB4N14161D6 |
| 308 (12.1 in.) | 403 | 42 | 28 | SB4M14308D6 | SB4N14308D6 |
| 455 (17.9 in.) | 550 | 63 | 35 | SB4M14455D6 | SB4N14455D6 |
| 602 (23.7 in.) | 697 | 84 | 41 | SB4M14602D6 | SB4N14602D6 |
| 749 (29.5 in.) | 844 | 105 | 48 | SB4M14749D6 | SB4N14749D6 |
| 896 (35.3 in.) | 991 | 126 | 55 | SB4M14896D6 | SB4N14896D6 |
| 1043 (41.1 in.) | 1138 | 147 | 62 | SB4M141043D6 | SB4N141043D6 |
| 1190 (46.9 in.) | 1285 | 168 | 68 | SB4M141190D6 | SB4N141190D6 |

General Specifications

| | | | |
|--------------------|-------------|-------------------------|--|
| Safety category | type 4 | Resolution | 14 mm |
| Operating distance | 0,2.....6 m | Functions (Master unit) | EDM, fixed/floating BLANKING, CASCADE Automatic/manual restart |

Electrical Specifications

| | | | |
|----------------------|-----------------------|-----------------|---------------------------|
| Power supply | 24 Vdc \pm 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

M12 8-poles Standard cable length 3, 5 or 10 m

Protection degree

IP 65

Emitter connection

M12 4-poles Standard cable length 3, 5 or 10 m

Housing material

Painted aluminium (yellow Ral 1003)

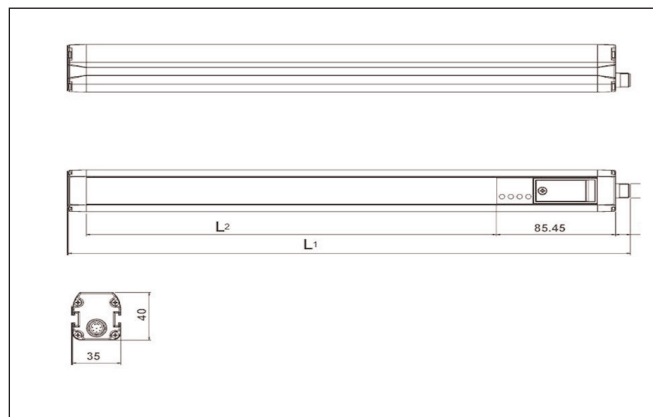
Master/Slave connection

M12 5-poles Standard cable length 0,5 m (included in slave unit package)

Weight

1.2 Kg max/m of total height

Dimensions



| MODELL | L1 (mm) | L2 (mm) |
|-----------------|---------|---------|
| SB4y-14/161-D6 | 256 | 147 |
| SB4y-14/308-D6 | 403 | 294 |
| SB4y-14/455-D6 | 550 | 441 |
| SB4y-14/602-D6 | 697 | 588 |
| SB4y-14/749-D6 | 844 | 735 |
| SB4y-14/896-D6 | 991 | 882 |
| SB4y-14/1043-D6 | 1138 | 1029 |
| SB4y-14/1190-D6 | 1285 | 1176 |

y = EDM/ Blanking/Cascade versions

Wiring Diagrams

