

# 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: TÜV, cULus

### 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**

Safety Light Curtains \_\_\_\_\_  
 Safety Category \_\_\_\_\_  
 Version \_\_\_\_\_  
 Resolution \_\_\_\_\_  
 Protected height \_\_\_\_\_  
 Operating distance \_\_\_\_\_

### Type Selection

Protected height	Overall height (mm)	Number of beams	Response time (ms) (Master)	Ordering no. Master	Ordering no. Slave
161	256	21	21	SB4M-14/161-D6	SB4N-14/161-D6
308	403	42	28	SB4M-14/308-D6	SB4N-14/308-D6
455	550	63	35	SB4M-14/455-D6	SB4N-14/455-D6
602	697	84	41	SB4M-14/602-D6	SB4N-14/602-D6
749	844	105	48	SB4M-14/749-D6	SB4N-14/749-D6
896	991	126	55	SB4M-14/896-D6	SB4N-14/896-D6
1043	1138	147	62	SB4M-14/1043-D6	SB4N-14/1043-D6
1190	1285	168	68	SB4M-14/1190-D6	SB4N-14/1190-D6

### General Specifications

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

### 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)



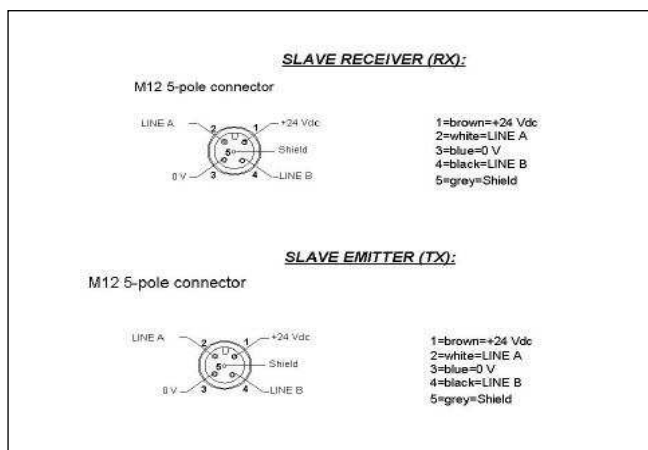
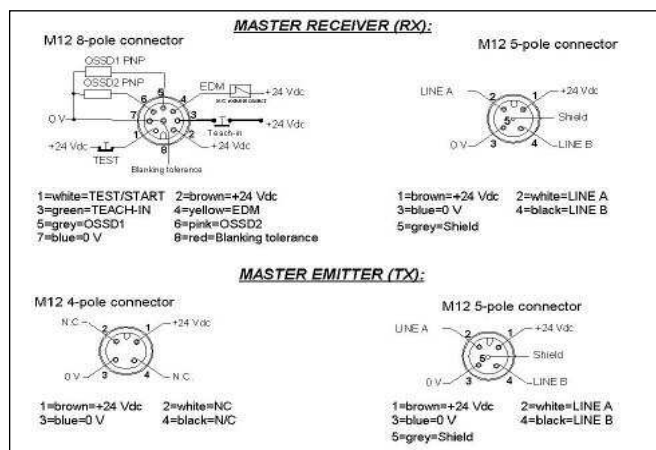
## Environmental Specifications

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

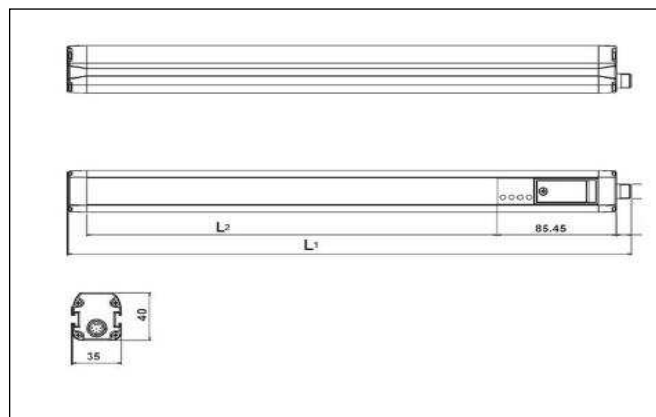
## Mechanical Specifications

Receiver connection	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

## Wiring Diagrams



## 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