



SCHMERSAL Tech Briefs: SLC440 Multifunctional Safety Light Curtains



Features



Rugged closed housing profile



Output and reset status LED endcap



7 segment & LED display



IP69 rated enclosure option for wash down applications

Overview

Schmersal's SLC440 Series are Type 4 Safety Light Curtains that incorporate a full range of common and unique application functions which are completely configurable without the need of a special tool or software.

The SLC/ SLG 440 series offers numerous functions as standard features: fixed blanking, floating blanking, fixed blanking with movable edge region, double reset, contactor control (EDM), automatic mode, re-start mode, and beam coding. Set up is simplified as selection and configuration of these functions are made via a single push-button and the 7-segment display, allowing for a user-friendly method which does not require separate software or costly set-up devices.

Installation of the emitter and receiver units is made easier with the integrated alignment aid. This function tests the first and last beams for alignment and displays the results on the 7-segment display. Once both are situated properly, the display can be changed over to show signal strength, to allow for fine tuning the alignment.

Operating status is clear and can be seen from a distance. The end cap of the receiver unit is molded from a semitransparent plastic that is illuminated by LED. It shows green for proper operation, solid amber for reset status, and red for a fault. Additionally, ease of alignment is provided by flashing amber on the end cap at different pulse frequency. Also, the 7-segment display which was so helpful in set up, now displays error codes and flashing signals to report specific faults and problems.

The SLC440 series features a one-piece extruded reinforced housing in a compact 28 mm x 33 mm rectangular profile. This housing profile has proven to be less susceptible to mechanical damage and misalignment from torsion or bending.

Options are also available for the SLC440 to be factory sealed within an IEC 60529 IP69 rated enclosure. This allows the curtains to be used in areas where they may be exposed to high pressure or high temperature wash downs or ECOLAB approved cleaning agents.

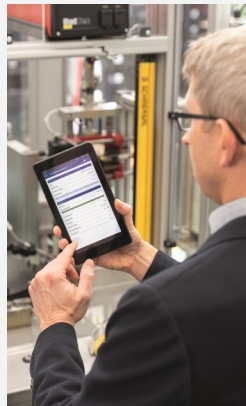
Safety light curtains SLC440 are used for the protection of hazardous areas, and are available with resolutions of 14 or 30 mm and protection field heights between 170 and 1930 mm. The series is suited for use in safety circuits up to PLe (EN 13849) or SIL3 (IEC 61508).

Bluetooth™ interface and SLC Assist app

Now a standard feature, integrated in all SLC440, BLE uses the Bluetooth™ Low Energy system which provides secure data transmission up to 5 meters. The data transmitted is accessible by the Schmersal SLC Assist App, available for Android and iOS smartphones and tablets.

Advantages of the data interface:

- Installation alignment aid
- Real-time status information
- Quickly resolve faults
- Device information
- Documentation



Applications

- Power-driven machines
- Power presses
- Folding or brake presses
- Filter presses
- Punching machines
- Robot cells
- Welding booths
- Printing machines
- Injection molding
- Materials handling and storage technology
- Palletizers
- Packaging equipment

Available Literature



Optoelectronic Devices

Ordering Details

SLC440-E/R②-①-01

- ① Protection Height: (mm)
- | | | | |
|-------------|-------------|-------------|------|
| 0170 | 0250 | 0330 | 0410 |
| 0490 | 0570 | 0650 | 0730 |
| 0810 | 0890 | 0970 | 1050 |
| 1130 | 1210 | 1290 | 1370 |
| 1450 | 1530 | 1610 | 1690 |
| 1770 | 1850 | 1930 | |

Bold heights are regularly stocked for 30mm resolution

- ② Resolution: (mm)
- | | |
|----|---------------------------|
| 14 | with range: 0.3 m to 7 m |
| 30 | with range: 0.3 m to 10 m |

Mounting hardware included

Accessories

Connector cables:

- KA-0804** 5 m cable for emitter
KA-0805 10 m cable for emitter
KA-0808 20 m cable for emitter
- KA-0904** 5 m cable for receiver
KA-0905 10 m cable for receiver
KA-0908 20 m cable for receiver

- KA-0974** Programming cable

Deflection mirrors:

ULS-M-①

- ① Mirror Height: (mm)
- | | | | |
|------|------|------|------|
| 0350 | 0500 | 0650 | 0800 |
| 0950 | 1250 | 1550 | 1700 |
| 1870 | | | |

IP69 Enclosure

①-440-ER-②

- ① Endcap material:
- | | |
|-----------|-----------------|
| SH | Stainless steel |
| PH | Polyamide |
- ② Protective Heights: (mm)
- | | |
|-----------|-------------|
| 01 | 170...490 |
| 02 | 500...890 |
| 03 | 900...1290 |
| 04 | 1370...1770 |

SLG/SLC must be ordered separately at time of order. IP69 enclosed SLG/SLC shipped complete.

Compatible Safety Controllers

- | | |
|--------------------|--------------------|
| SRB-E-201LC | SRB-E-322ST |
| SRB-E-201ST | SRB-E-402ST |
| SRB-E-301ST | SRB-301MC |
| SRB-E-212ST | SRB-E-204ST |

Bold part numbers are regularly stocked

Contact

Schmersal USA

15 Skyline Drive
 Hawthorne, NY 10532
 Tel: 914-347-4775
 Fax: 914-347-1567
 E-mail: salesusa@schmersal.com

Schmersal Canada

29 Centennial Road, Unit 1
 Orangeville ON L9W 1R1
 Tel: 519-307-7540
 Fax: 519-307-7543
 E-Mail: salescanada@schmersal.com