



## SLC440AS-ER-0970-14

- Resolution 14 mm
- Range 0,3 ... 7
- Safety type 4 in accordance with IEC 61496-1
- Integrated AS-Interface
- Protection field height 170 mm - 1770 mm
- Configurable blanking functions
- Integrated status indicator

## Data

### Ordering data

|                               |                     |
|-------------------------------|---------------------|
| Product type description      | SLC440AS-ER-0970-14 |
| Article number (order number) | 103007492           |
| EAN (European Article Number) | 4030661449838       |
| eCl@ss number, version 12.0   | 27-27-27-04         |
| eCl@ss number, version 11.0   | 27-27-27-04         |
| eCl@ss number, version 9.0    | 27-27-27-04         |
| ETIM number, version 7.0      | EC002549            |
| ETIM number, version 6.0      | EC002549            |

### Approvals - Standards

|              |                         |
|--------------|-------------------------|
| Certificates | TÜV<br>cULus<br>ASi-SaW |
|--------------|-------------------------|

### General data

|                        |  |
|------------------------|--|
| Standards              | CLC/TS 61496-2<br>EN 50295<br>EN IEC 62061<br>EN ISO 13849-1<br>EN IEC 61496-1 |
| Working principle      | optoelectronic   |
| Housing material       | Aluminium  |
| Reaction time, maximum | 23 ms  |
| Gross weight           | 1,730 g  |

### General data - Features

|                                     |     |
|-------------------------------------|-----|
| Safety functions                    | Yes |
| Blanking function                   | Yes |
| 7-segment display                   | Yes |
| Integral system diagnostics, status | Yes |
| Number of beams                     | 96  |

### Safety classification

|  |                          |
|--|--------------------------|
| Standards  | EN IEC 62061             |
| Performance Level, up to                                   | e                        |
| Category   | 4                        |
| PFH value  | $5.17 \times 10^{-9} /h$ |
| Safety Integrity Level (SIL), suitable for applications in | 3                        |
| Mission time   | 20 Year(s)               |
| Safety type in accordance with IEC 61496-1                 | 4                        |

### Mechanical data

|  |        |
|--|--------|
| Detection ability for test bodies at $v = 1.6 \text{ m/s}$ | 14 mm  |
| Height of the protection field                             | 970 mm |
| Range, protection field, minimum                           | 0.3 m  |

|                                  |        |
|----------------------------------|--------|
| Range, protection field, maximum | 7 m    |
| Wave length of the laserdiode    | 880 nm |

### Mechanical data - Connection technique

|                                  |                            |
|----------------------------------|----------------------------|
| Termination                      | Connector                  |
| Terminal connector, Recipient    | Connector plug M12, 5-pole |
| Terminal, Connector, Transmitter | Connector plug M12, 4-pole |

### Mechanical data - Dimensions

|                       |          |
|-----------------------|----------|
| Height of transmitter | 1,083 mm |
| Height of Receiver    | 1,103 mm |
| Length of sensor      | 33 mm    |
| Width of sensor       | 27.8 mm  |

### Ambient conditions

|                                   |                                 |
|-----------------------------------|---------------------------------|
| Degree of protection              | IP67                            |
| Ambient temperature               | -10 ... +50 °C                  |
| Storage and transport temperature | -25 ... +70 °C                  |
| Resistance to vibrations          | 10 ... 55 Hz, amplitude 0.35 mm |
| Restistance to shock              | 10 g / 16 ms                    |
| Protection class                  | III                             |

### Ambient conditions - Insulation values

|   |        |
|---|--------|
| Rated insulation voltage $U_i$            | 32 VDC |
| Rated impulse withstand voltage $U_{imp}$ | 0.8 kV |
| Overvoltage category                      | III    |
| Degree of pollution                       | 2      |

### Electrical data - AS Interface

Rated operating voltage 18 ... 31.6 VDC (Protection against polarity reversal)

AS-i Current consumption, maximum 50 mA

## Electrical data - AS-Interface specification

|                                  |   |
|----------------------------------|---|
| AS-i Specification               | Safety-Slave  |
| AS-i Version                     | V 3.0   |
| AS-i Profile                     | S-0.B.F.E   |
| AS-i Input, Channel 1            | Data bits DI 0 / DI 1 = dynamic code transmission   |
| AS-i Input, Channel 2            | Data bits DI 2 / DI 3 = dynamic code transmission   |
| AS-i Outputs, DO 0 ... DO 3      | No Function   |
| AS-i Parameter bits, P0          | No function   |
| AS-i Parameter bits, P1          | Low beam quality  |
| AS-i Parameter bits, P2          | No function   |
| AS-i Parameter bits, P3          | Internal device error (FID)   |
| Note (AS-i Parameter bits)       | Set the parameter outputs to "1111" (0xF)<br>FID: periphery error                                   |
| AS-i Input module address        | 0   |
| Note (AS-i Input module address) | Preset to address 0, can be changed through AS-interface bus master or hand-held programming device |

## Electrical data - Auxiliary voltage

|                                |   |
|--------------------------------|---|
| Operating voltage              | 24 VDC -15 % / +10 % (stabilised PELV power supply) |
| Power consumption, Receiver    | 150 mA  |
| Power consumption, Transmitter | 75 mA   |
| Rated operating voltage        | 24 VDC  |

## Status indication

Note (LED switching conditions display) Green/red LED (AS-i duo LED): Supply voltage / communication error / slave address = 0 / periphery error detected

## Note

Note voltage AUX DC

stabilised PELV power supply

## Pictures

### Product picture (catalogue individual photo)



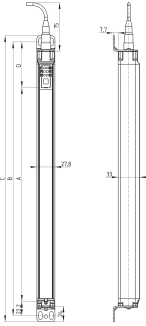
ID: kslc4f94

| 203.3 kB | .jpg | 352.778 x 322.439 mm - 1000 x 914 px - 72 dpi

| 13.9 kB | .png | 74.083 x 67.733 mm - 210 x 192 px - 72 dpi

| 40.1 kB | .jpg | 123.472 x 112.889 mm - 350 x 320 px - 72 dpi

### Dimensional drawing basic component



ID: 5slc4g26

| 5.1 kB | .png | 74.083 x 158.75 mm - 210 x 450 px - 72 dpi

| 218.6 kB | .jpg | 352.778 x 757.061 mm - 1000 x 2146 px - 72 dpi

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The details and data referred to have been carefully checked. Images may diverge from original. Further technical data can be found in the manual. Technical amendments and errors possible.

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